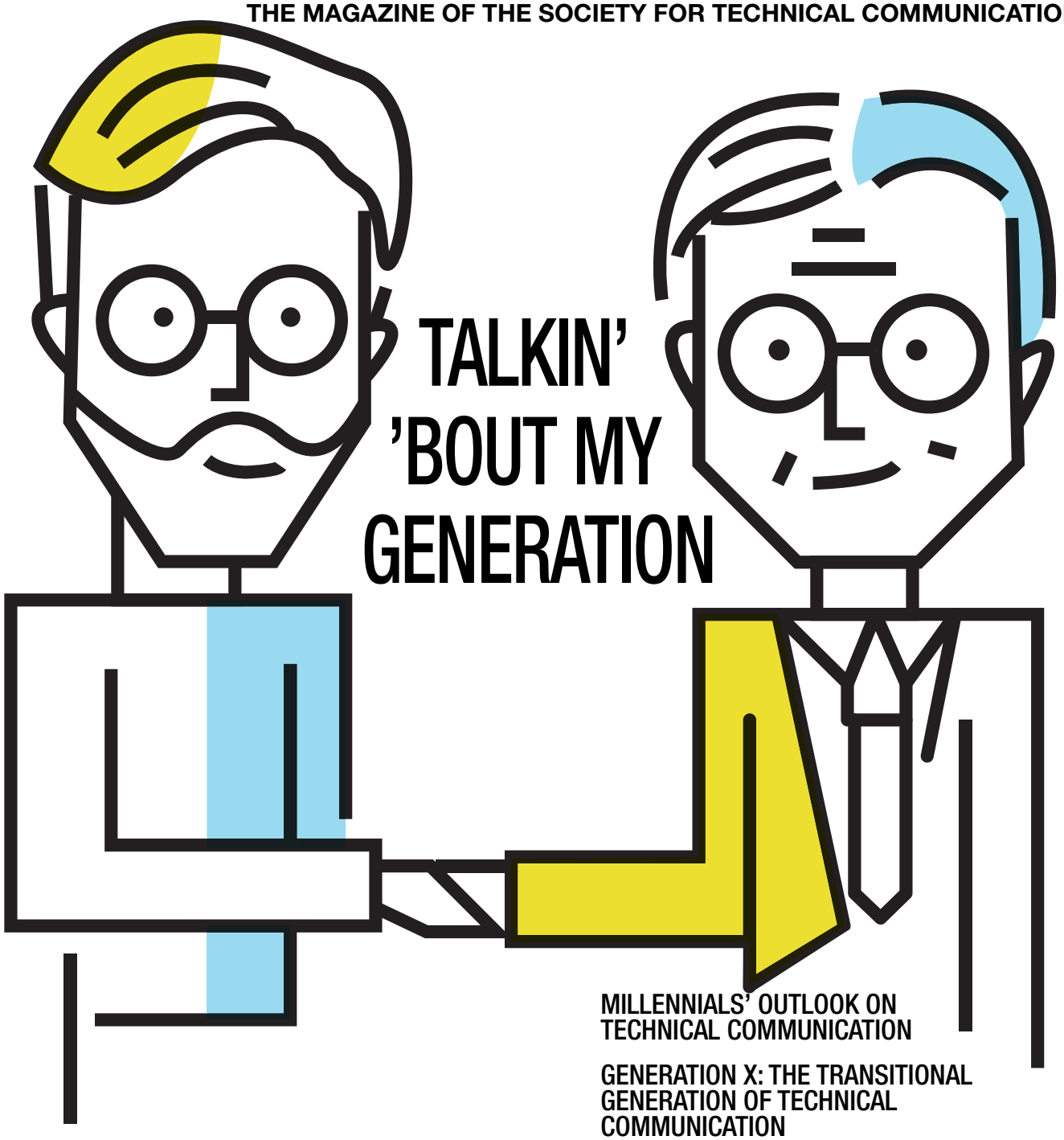
STC

OCTOBER 2016

intercom

THE MAGAZINE OF THE SOCIETY FOR TECHNICAL COMMUNICATION



TALKIN' 'BOUT MY GENERATION

MILLENNIALS' OUTLOOK ON TECHNICAL COMMUNICATION 6

GENERATION X: THE TRANSITIONAL GENERATION OF TECHNICAL COMMUNICATION 10

BOOMING WITH A GEN X 13

ONBOARDING MILLENNIALS: FROM INSTRUCTIVE TO SUPPORTIVE EMPLOYEE TRAINING 15

Introducing

FLARE™ 12

Create Stunning Web and Print-Based Documentation Your Users Will Love

“One of my favorite new features simplifies creating responsive content. It allows users to select and design a responsive layout medium using the new user-friendly Responsive Layout Editor.”

Denise Kadilak | **Information Architect and Team Manager, Blackbaud**

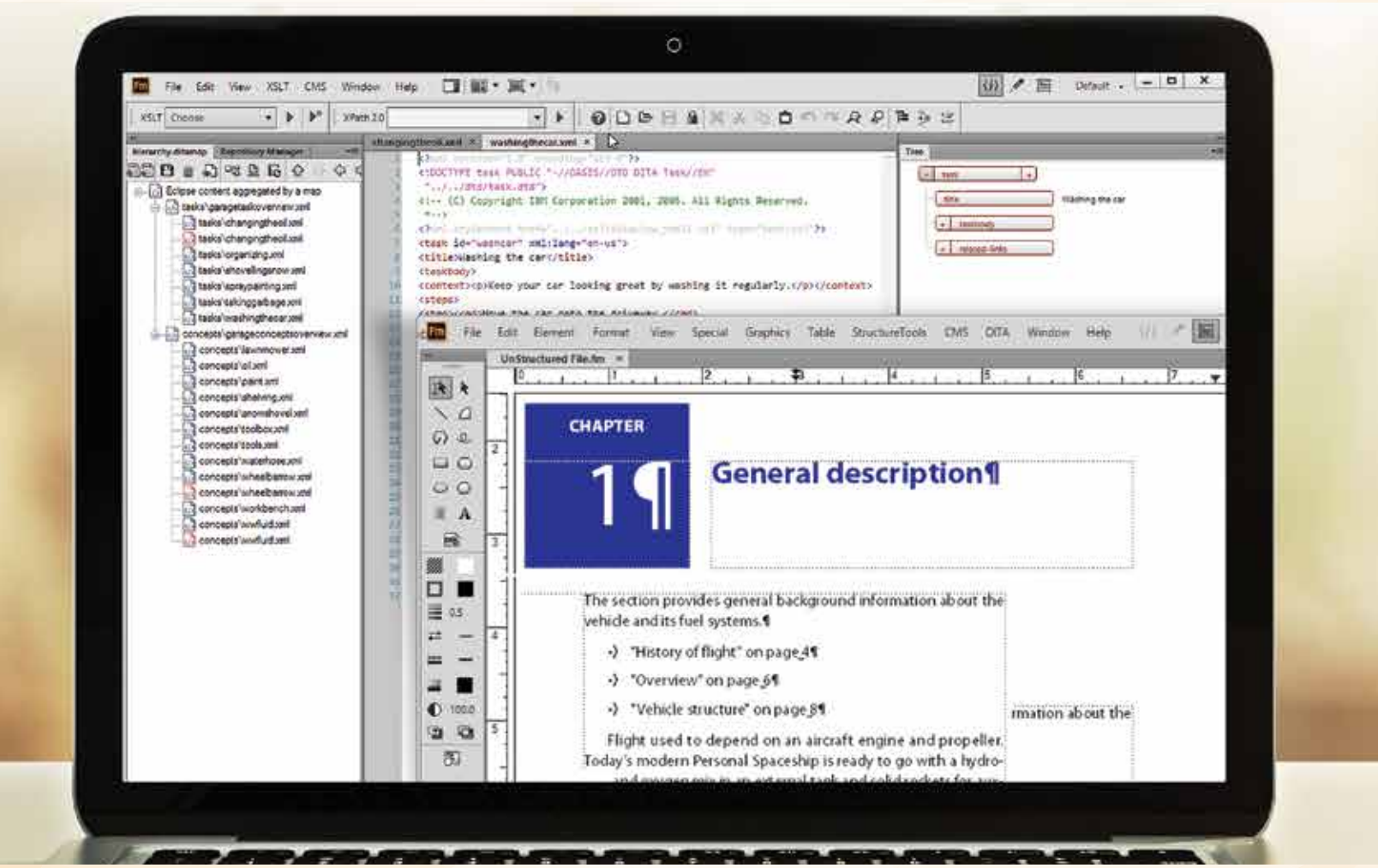
MAJOR NEW FEATURES

- **Responsive Layout Editor**
  Create Responsive Content without Any Coding or Web Developer Resources
- **New Stylesheet Editor**
  Multiple Medium Views Such as Print, Mobile, Tablet or Any Customized View
- **Multilingual Publishing**
  Multilingual Web and Print Publishing from a Single Project
- **Preserve Tracked Changes**
  Tracked Changes Now Preserved in Word and PDF Output
- **Plus 64-Bit Support, Source Control Improvements, Snippet Enhancements and More!**

Learn More at MadCapSoftware.com/Flare12

Copyright © 2016, MadCap Software, Inc., and its licensors. All rights reserved. MadCap Software, the MadCap Software logo, and MadCap Flare are trademarks or registered trademarks of MadCap Software, Inc., in the United States and/or other countries. Other marks are the properties of their respective owners.

Adobe FrameMaker (2015 release)

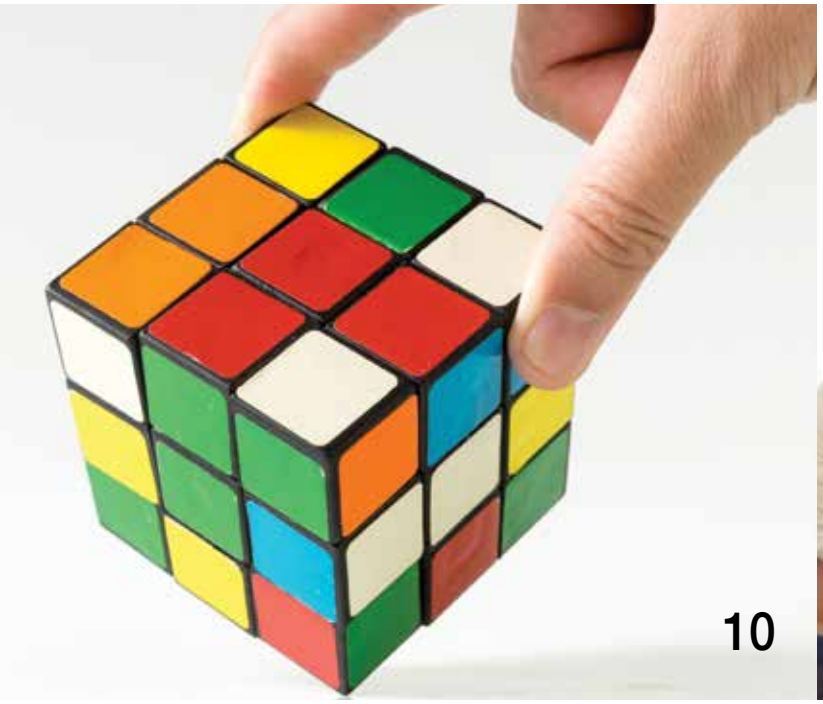

CHAPTER
1
General description
The section provides general background information about the vehicle and its fuel systems.
"History of flight" on page 4
"Overview" on page 6
"Vehicle structure" on page 8
Flight used to depend on an aircraft engine and propeller. Today's modern Personal Spaceship is ready to go with a hydro-

Make the move to structured authoring within FrameMaker

FrameMaker makes migrating to structured authoring easier with support for both types of content, unstructured and structured, in the same publication.

For a personalized demo or questions, please reach us at **techcomm@adobe.com**

© 2016 Adobe Systems Incorporated. All rights reserved



October 2016

Volume 63 | Issue 9

5 **From the Editor**

FEATURES

TALKIN' 'BOUT MY GENERATION

6 **Millennials' Outlook on Technical Communication**
By Paul Duarte
The author gives an overall view of how the next generation sees the technical communication profession and how interested students or young professionals can adapt to it.

10 **Generation X: The Transitional Generation of Technical Communication**
By Danielle M. Villegas
The author explains how members of Generation X, no matter how far along the career path, have a solid work ethic that is based on knowledge, innovation, and flexibility.

13 **Booming with a Gen X**
By Johanne Lavallee and Joanne Vidal
The author explains how she shed stereotypes with a personal anecdote between Baby Boomer and Gen X colleagues.

15 **Onboarding Millennials: From Instructive to Supportive Employee Training**
By Oded Ilan
How do demographic and technological changes affect employee training practices? The author explains why businesses should invest in their Millennial employees, as well as the best ways to do so.

TEACHING & TRAINING

19 **Don't Edit, Teach: Strategies for Mentoring Writers from a Writing Professor**
By Jessica McCaughey
Learn practical techniques, supported by proven pedagogy, for helping your employees develop as writers through a refined feedback process focused on what you and the organization truly value in writing. Readers will gain techniques for commenting on and discussing drafts that allow writers to develop as communicators.

CERTIFIED PROFESSIONAL

Technical Communicator

CPTC™

FOUNDATION

- **Project Planning**
- **Project Analysis**
- **Content Development**
- **Organizational Design**
- **Written Communication**
- **Reviewing & Editing**
- **Visual Communication**
- **Content Management**
- **Production & Delivery**

Certified Professional Technical Communicator™ (CPTC)

Advance your Career and the Profession
Earn the CPTC Foundation Credential Today

The Certified Professional Technical Communicator (CPTC) credential assures employers, colleagues, and the public that you have the knowledge and skill to handle complex technical communication projects from the project planning stage through production and delivery.

Benefits

Why earn the CPTC credential? Because the CPTC credential:

- Distinguishes you from your peers;
- Shows you have the most up-to-date knowledge in the field;
- Opens up job opportunities and enhances job mobility;
- Elevates the profession;
- Gives you a sense of pride in your career; and
- Demonstrates your commitment to the field.

The CPTC credential gives you the edge you need to stand out to employers.

Continuing Education Requirements

Points may be obtained the following ways:

Event	Points
STC Annual Membership (any membership type for Foundation certificants)	2
STC Recorded Webinar (self-study)	1
STC Live Educational Webinar (free, sponsored, and community webinars excluded)	2
STC Online Courses	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Virtual Summit	4
STC Annual Summit	8
Begin and complete a college-accredited course related to the Technical Communication field	8
Published articles that relate to any aspect of Technical Communication (2/article)	2
Published books publicly available on topics related to Technical Communication (5/book)	5
Presentations at conferences related to aspects of Technical Communication (2/presentation)	2
Total needed within 2 years post-certification date	**12**

Fees

Exam fees: STC Members $250, Non-Members, $495

Be a leader. ***Take your career to the next level by obtaining your credential. It's the most efficient way to prove your skills and knowledge in the technical communication field.***

CONTACT

For more information about certification and to start the process, visit *www.stc.org* or email *stc@stc.org.*

Advance your Career and the Profession — Earn the CPTC Foundation Credential Today!
Learn more at www.stc.org/certification

25

28

35

YOUR CAREER

22 **Fight and Flight: The Strange Comfort of Academic Rigor and the Strange(r) Unknown of Technical Communication**
By Aaron Dawson
Technical writers tend to be performance-based, lifelong learners. This article argues that technical writers can re-tool this drive by combining their motivations toward professional development and self-enrichment. The author offers three solutions: proficiency using a markup language (like DITA), empathizing with our audiences via storytelling, and trading competency for nuance.

25 **Cash in on Your Financial Editing Skills**
By Jessica Kreger
Your technical editing skills can be an asset in the finance industry. This article covers the roles of U.S. regulatory agencies, writing for an international audience, resources for maturing your financial industry knowledge, and a summary of the wealth of editing opportunities the financial industry affords.

WRITING & EDITING

28 **Technical Writing by the Numbers**
By Brian Lindgren
Given the importance of numbers in technical communication, the author provides examples of where the use of numbers was misguided.

SOCIETY PAGES

32 **Go for the Gold in 2017!**
By Erin Gallalee

32 **From the Journal Editor**
By Sam Dragga

COLUMN

MEET THE CHANGE AGENTS

35 **An Interview with Dr. Carmen Simon**
By Scott Abel

DEPARTMENTS

FYI

39 **Mark Your Calendar**
Organization Events Across the Globe

WITFUL THINKING

40 **In Support of a User's Manual: Taken a Bit Too Far?**
By Tammy Van Boening

ADVERTISERS

9	36Software
C2	Adobe
C4	MadCap Software
2, 34	STC Certification
4	STC Education
30, 31	STC Membership
C3	STC Summit

40

Experience Professional Growth with STC Education!

STC offers a wide variety of online education options throughout the year. Whether you need an introduction to a subject, an in-depth review, or just a brush-up, STC has what you need. Advance your career with STC's varied collection of online education.

Live Weekly Webinars

Multi-Week Online Courses

Recorded Webinars

Free On-Demand Seminars
(Members Only)

Visit stc.org/education

A Note from the Editor

OCTOBER *INTERCOM* FOCUSES on perspectives, especially generational ones, with a theme borrowed from The Who, "Talkin' 'Bout My Generation." In four articles on generations, including Millennials, Gen X, and Baby Boomers, the authors provide their perceptions of how interpersonal and business relationships benefit when nurturing the differences in traits and skill sets between generations.

Through personal interviews, Paul Duarte looks at how Millennials (or Gen Y) have discovered technical communication, their changing views of the field upon entering it, their mentor-mentee relationships, and their advice for others. Danielle Villegas offers her perspective as a Gen X or what is known as the "transitional generation." She emphasizes the experience and versatile skills Gen X-ers bring to the workplace. She also tackles the issue of ageism the generation faces, arguing that Gen X and Gen Y make the strongest teams when they combine their talents.

Johanne Lavallee and Joanne Vidal explain the strengths of their work relationship as Gen X and Baby Boomer colleagues. They specifically remark on the importance of shedding stereotypes and learning from the unique work styles of other generations. And from the business perspective, Chief Marketing Officer Oded Ilan at Iridize has written an article on Millennial employee training and effective onboarding practices.

Other content in this issue includes an article from Professor Jessica McCaughey on strategies for mentoring writers in business settings. She provides practical techniques from proven classroom strategies for helping employees improve their writing. Aaron Dawson also writes from an educational perspective—that of lifelong learning for technical communicators. He argues that technical writers can retool their inquisitive natures for ongoing self-improvement through three solutions: markup languages, storytelling, and ongoing competency. In addition, Jessica Kreger tells us how we can transfer our technical editing skills in the finance world; and Brian Lindgren provides us with several striking examples of where the use of numbers has been misguided in technical documentation.

This issue also includes an update from *Technical Communication* journal editor Dr. Sam Dragga; an interview by Scott Abel of cognitive scientist Dr. Carmen Simon; and a witty piece from STC member Tammy Van Boening.

I hope you enjoy reading this issue as much as I enjoyed editing it. Please send your feedback to the us on *Intercom* Online.

—Liz Pohland
liz.pohland@stc.org

intercom

Intercom, the magazine of the Society for Technical Communication, is published to provide practical examples and applications of technical communication that will promote its readers' professional development.

Publisher Society for Technical Communication
Editor Elizabeth E. (Liz) Pohland
Assistant Editor James Cameron

CONTRIBUTING EDITORS
Scott Abel, *Meet the Change Agents*
Thomas Barker, *The Academic Conversation*
Nicky Bleiel, *The Essentials*
Kit Brown-Hoekstra and Cindy Currie, *Ask a Tech Comm Manager*
Jeanette Evans and Charles Dull, *Emerging Technologies*
Ray Gallon, *Standard Deviation*
Mark Lewis, *Metrics*
Linda Roberts and Lisa Cook, *All Access*
Derek Ross, *Ethics*
Kirk St.Amant, *Student Perspectives*
Kirk St.Amant, *Working Locally, Communicating Globally*
Brian Still, *Trends in Usability*

EDITORIAL ADVISORY PANEL
Saul Carliner (Chair), Michelle Despres, Linda Oestreich, Marta Rauch, Kelly Schrank, and Kirk St.Amant

STC BOARD OF DIRECTORS
Officers
Adriane Hunt, *President*
Alyssa Fox, *Vice President*
Bernard Aschwanden, *Immediate Past President*
Jane Wilson, *Treasurer*
Kirsty Taylor, *Secretary*
Directors Craig Baehr, Alisa Bonsignore, Liz Herman, Cindy Pao

SOCIETY FOR TECHNICAL COMMUNICATION
9401 Lee Highway, Suite 300
Fairfax, VA 22031-1803
+1(703) 522-4114 | +1(703) 522-2075 fax
Send questions and correspondence to the editor at the above address. General information about STC: stc@stc.org *or* www.stc.org.

Address Changes: membership@stc.org
Intercom Editorial: intercom@stc.org

Reprint Permissions: www.copyright.com
Intercom (ISSN 0164-6206) is published 10 times a year (monthly, except for August and December) by the Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803, a nonprofit educational organization, as a service to its membership. Membership in STC includes a subscription to **Intercom**. Periodicals postage paid at Fairfax, VA, and additional offices.
Postmaster Send address changes to **Intercom**, Attn: Membership, c/o Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803.

Copyright © 2016 by the Society for Technical Communication. All rights reserved. Printed in the USA. All articles in **Intercom** are copyrighted by the authors unless otherwise indicated. Anyone interested in reprints, reproductions, or reuse must contact the authors for permission.

To advertise in **Intercom**, contact Stacey O'Donnell at *stacey.odonnell@stc.org*, Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031. Ph: +1(703) 522-4114; Fax: +1(703) 522-2075.

Millennials' Outlook on Technical Communication

shutterstock.com/ Mangsaab

MILLENNIALS, also known as Generation Y, are the largest demographic in the United States. Born between 1980 and the mid-2000s, they represented one third of the U.S. population in 2013, according to a White House report ("15 Economic Facts About Millennials"). As they enter the workforce, they will shape all professions in different ways, including technical communication.

By PAUL DUARTE | *STC Member*

This article looks at how Millennials discovered technical communication, how their perceptions of it changed when they entered the workforce, the challenges they face in the workforce, who helped them in their careers the most, how they see themselves as technical communicators, and advice they have for other Millennials. Their perspectives in this article aim to give an overall view of how the next generation sees the technical communication profession and how interested students or young professionals can adapt to it.

Discovering the Profession

Several of the Millennials interviewed for this article discovered technical writing as a way to combine many of their talents and passions. Nikhila Vijaybhaskar, originally from India, now working as a documentation and instruction specialist in Cambridge, MA, said technical writing was a profession where she could combine her engineering education with one of her lifelong passions:

> "Ever since I was a child, I've been really into learning languages. I think I can speak 4 languages fluently-three of them are Indian languages, and I can read and write in those languages. So I was just looking for a way where I can combine my technical expertise with a job where I can write. Several Google searches later, I said, 'Oh, I want to do technical writing, I want to go to school for it.'"

Other Millennials fell into it by chance, like Greta Boller, who works as a contract technical writer in the Greater Washington, DC area:

> "I posted my résumé to the University of Maryland's job board and went through and clicked the areas of interest. I heard about technical writing through the grapevine very vaguely, but I clicked it anyway. Sure enough, the company found me and offered me the internship right off the bat and so once I started working, I started loving it, and it just never left."

The Millennials who found technical communication were curious when they first heard about it through a job search, a colleague, or a friend. Once they discovered they could use the writing skills they honed in their education or other pursuits, they found they could use them in a very challenging, yet rewarding career.

New Perceptions of the Profession and Workplace

Many Millennials are starting to enter the workforce, so they are not too far removed from their studies. Some are still studying in college for their Bachelor's or Master's degrees, while others are making a career change. Internships are a good stepping stone to learning about the workplace. Often their perceptions of technical communication changed and that influenced their careers. Leah Catania, a professional writing graduate student at the University of Massachusetts Dartmouth, said:

> "I didn't know a whole lot about it [the profession] before I jumped feet-first into it. I kind of just assumed that I'd be writing dry technical manuals, and that was kind of it. But as I started studying it and getting into the profession, everything is much more than that."

Leah had a technical writing internship at Oracle in Bedford, MA, this past summer. She had to learn how to work in areas she did not have experience in before.

> "The writing was what I expected, but we're also working on videos, and that was something I did not expect to really have any experience in or doing when I got there. We learned how to write scripts, we learned how to use Adobe Captivate, they're all screen capture videos of software programs. We were developing style guides for the videos, we were working with UX teams and graphic designers to come up with those styles, which was definitely different, not what I was expecting."

These were just some of the initial challenges Millennials had to overcome as they adapted to the workforce.

Facing New Challenges

Steve Jong, a technical writer with more than 30 years of experience, says that Millennials have many challenges to face as they enter the profession: offshoring of positions, the downsizing of technical publication departments, the closing of apprenticeships. But he is confident that Millennials will overcome these structural and economic challenges. "Is the incoming workforce better suited to face those challenges? That's a great question," Jong said.

> "I think they are, because of their from-birth exposure to computers and the Web and their specialized education. Clear communication will be a top skill for the foreseeable future. The Millennials I have worked with tend to be fast and self-confident. They are always connected, always communicating…. the Millennials I know tend to think more in terms of making things better, and doing it in groups. (I've seen what Kickstarter can do.) Many people working together, and many allied groups coming together, can accomplish great things."

But there are some issues that affect Millennials' ability to land their first position in the profession. One of them is access to some of the big-name software packages, like Adobe Technical Communication Suite or MadCap Flare, as Greta Boller explains:

> "[Employers] are expecting a level of experience with software products that you never heard of, let alone

touched as a student. It's very rare to use MadCap or the Adobe products in a schooling environment. So you have to land that (private sector) position and learn it or take a class to keep up with the requirements of the position nowadays.

It's more of an employer problem, although schools are behind the curve, too. At the University of Maryland, technical writing was writing cover letters and résumés, it wasn't actually about technical writing. … Once schools realize products like MadCap aren't going away and that students need to learn them, that's when they will come into play. But employers need to give their employees the benefit of the doubt. We can learn technology, that's the whole point of the profession, so we can catch onto things quickly, and learn to use it. So until they [employers] can give them [new employees] a way [to learn], we're in a bind."

Different Preferences in Working Environments

While Millennials may seem to be largely team-oriented and collaborative, there are others who enjoy working as lone writers, like Steven Winnefield, who works as a technical writer in the Greater Houston area. "I much prefer being a lone writer," said Winnefield, who has worked in the field for 13 years.

"[B]eing a lone writer gives me the me opportunities to find ways I can contribute my tech comm skills to all sorts of stuff. I started out in my current position as just the technical writer creating user guides and such. Now I'm actually a full member of the Marketing Department, writing all of our marketing communication, in addition to my technical/user guide writing duties."

In addition to a divide between lone writers and groups, some Millennials like working for large companies, while others prefer small ones. The reason? It depends on their priorities in what they want out of their jobs.

Magella Honeyfield, a student at the New Mexico Institute of Mining and Technology, said she prefers to work in a small company because she likes the close relationships with other employees. However, Nikhila Vijaybhaskar says she prefers to work in larger environments. She says that it encourages her to make new connections and seek people out who can later help her on a project she works on, or she can help them on a project.

Career Advisors

Millennials owe a great debt to mentor figures in their lives. They gave the next generation of technical writer skills and knowledge that helped them discover their talents in the profession and an ability to excel professionally.

Many Millennials thank a teacher or professor for helping them discover the profession or change their work habits for the better, like Magella Honeyfield:

"Yes, Dr. Durao. She is phenomenal. Every time, she was just so straightforward with me. I think her honesty and her bluntness gave me the reality check that you can't just throw things together, you need to take the time to put effort into it. She said to take the time you need to do projects and don't slap them together at the last minute. Her classes are hard and time-consuming, but I learned more from her than any other teacher as a student."

Others, like Steven Winnefield, thank mentors they met on the job, who gave them the skills and working style they could take with them in their careers.

"The editors in my first job held small training sessions for the new technical writers on grammar, how to adhere to the style guide, resolving common writing problems, etc. That was a huge help…. I'm glad I received that training, because if I started out as a lone writer, I think it'd be much more difficult. Since then in subsequent positions, I usually end up finding a mentor figure of some sort, who helps me find the ropes of each company or department, since I think just about every company's culture is different, and it's important to understand that culture in order to be successful."

A Technical Writer Is…

When asked to describe themselves as a technical writer in one word, Millennials had different terms to define themselves. Their descriptions reflect their passions and work priorities.

"[A] volunteer. I want to lend my skills to anyone and any project I can. I've offered to edit 300 page documents, all the way down to offering to proofread emails. I believe in optimizing your company's image as much as possible through its communication in all forms, and again I just love to learn new stuff," says Steven Winnefield.

"Thorough.... When I enter an office, I have an adjustment period where I evaluate what an office already has—what they're doing without knowing it. What templates are they using, and they don't realize that they're templates. What knowledge management they're using, even if they don't realize it's knowledge management. Then I build the programs from the ground up … that's what I enjoy doing. I make sure that from minute one, there's an answer to a documentation question," says Greta Boller.

"Flexible. I had to be flexible in every project in the 14 months I've been with the company because things change.… And working in Corporate America, you're going to encounter a lot of personalities there, and you have to understand you have to look through their personality and

that person is great at their job and that's why they were hired by the company.… you have to be flexible with their time, your understanding, and you have to be able to run with it," says Nikhila Vijaybhaskar.

A Boomer's Confidence in Millennials Evolving the Profession

Steve Jong mentors new technical communicators in STC's New England chapter. He is a firm believer in Baby Boomers and other experienced technical writers handing off their "tribal knowledge" to the next generation so that they have a solid foundation on which to not only build their careers, but also to use their skills to move the profession forward and evolve it in the twenty-first century, as technology changes and people are even more reliant on technical communication. Steve says:

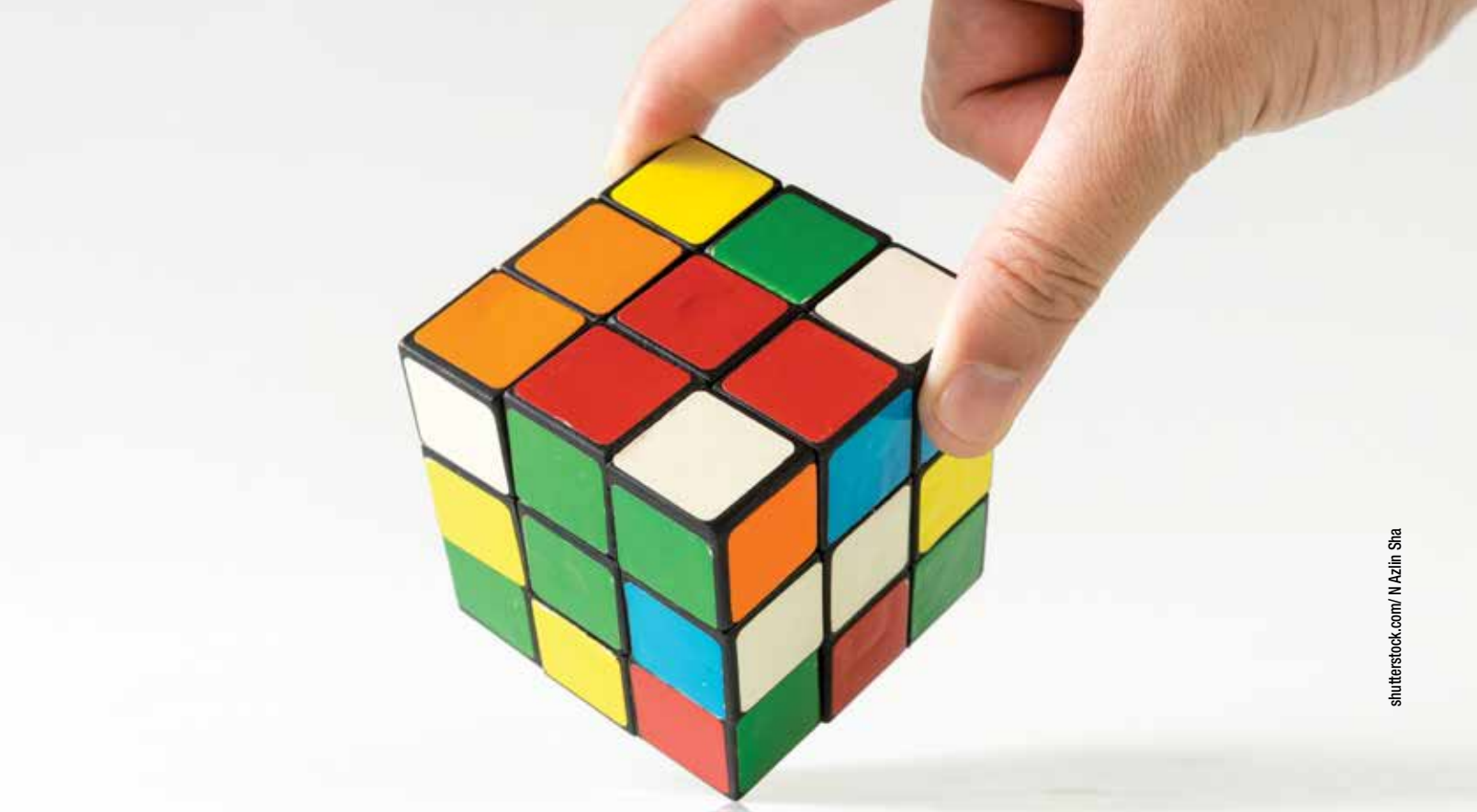
> "I think Millennials will shape the profession by redefining it from technical communication to something embracing all modes of communication without preconceptions (not being book bound). They will decide what to do with information in the cloud and with presenting information as augmented reality. (Who knew the killer app would be Pokémon Go?) They will realize what can be done, not with enclaves in a few countries, but with fully interconnected global teams. In fact, by explaining technology, by helping people accomplish their goals, and by showing users how to make effective use of products, I think Millennial technical communicators will make the world a better place." i

PAUL DUARTE *(duartepaa@gmail.com) is a junior-level technical writer who works in the Greater Boston area. He has a Master of Arts in Professional Writing from the University of Massachusetts Dartmouth and serves on the STC New England Chapter council, with an interest in reaching out to students of technical communication and bringing them into the profession.*

SUGGESTED READINGS

15 Economic Facts About Millennials. The Council of Economic Advisers. October 2014, *https://www.whitehouse.gov/sites/default/files/docs/millennials_report.pdf.*

Van Laan, K. *The Insider's Guide to Technical Writing.* Laguna Hills, CA: XML Press, 2012.



shutterstock.com/ N Azlin Sha

Generation X:
The Transitional Generation of Technical Communication

By DANIELLE M. VILLEGAS | *STC Member*

GENERATION X has often had a less than desirable reputation over the decades. As a member of this generation, I've never understood this mentality. Sure, we were originally considered spoiled, teenage slackers as depicted in John Hughes' films like *Ferris Bueller's Day Off* or *The Breakfast Club.* We were also portrayed to be like the young professionals Chandler, Monica, Ross, Rachel, Phoebe, and Joey of the television show *Friends* or The Brat Pack in *St. Elmo's Fire.* However, we've had plenty of time to grow up. Now that this generation is hitting middle age and makes up 60% of the workforce, we're a demographic that is still ignored by marketers—somehow maligned again.

What seems to be overlooked is that Generation X has been an important part of how our society has formed as a digital society. Generation X has been a transitional generation. We came of age during a time known as "the decade of excess" when the economy soared, and the Cold War ended. We challenged our minds with Rubik's Cubes, and were the first gamers obsessed with our Atari 2600 consoles, playing Pac Man, Donkey Kong, and Asteroids for hours at a time. MTV started a media revolution by playing videos on a television channel twenty-four hours a day, seven days a week, 365 days a year, which we devoured, and cable television as a medium was starting to take off. VHS was the video format which allowed us to record our favorite television programs or watch our favorite movies over and over. CDs were revolutionary technology that improved the sound and quality of our music, if we weren't busy listening to homemade mix-tapes/cassettes on our Walkmans or boom boxes. We were the first generation to be latchkey

kids due to high divorce rates taking hold and more households having both parents working full time. As the first generation to own personal computers, we were also the first to conquer meeting people and socializing on the Web long before social media took off, and even took on online dating before Match.com or eHarmony. We were the first to scramble to solve the global problems related to Y2K.

Professionally, Generation X has experienced many challenges to get to where they are today. After all, we were the first generation that was not expected to do better than their parents. Even so, Elissa Collier summed up the positive attributes of this generation by saying,

> "[Generation X possesses] an entrepreneurial spirit, a do-it-yourself attitude and, in contrast to the generations before them, embrace change in the workplace. They are career-oriented but place a strong emphasis on family time and strive for a good work-life balance. They enjoy freedom and autonomy—they work to live rather than live to work, which is often frowned upon as slack and difficult to manage by the Boomers, who prefer to do the long hours. A flexible workplace is a must for a Gen X-er and they value constructive feedback—which both need to be taken into consideration when managing Gen X.
>
> Gen X-ers are seen to be in the best position in the job market at the moment as they are set to step up to the plate and fill the leadership roles when the boomers retire. Where boomers have the experience, Gen X-ers also have the qualifications to go with it. Brought up in an era of technological and social change, Gen-X is tech-savvy and open to change. They possess a different work ethic to the boomers—Gen X thrives on diversity, challenge, responsibility, honesty and creative input, compared to the boomers' preference for a more rigid, work-centric approach" (Collier 2012).

I don't think I could've phrased it better myself. It was really out of necessity that we developed this generational personality, and it's not something that has really changed much over the years.

I talked with several other technical communicators of my generation to see if they had similar experiences as they grew their technical communications careers. It was interesting that, even though we came of age in different parts of the United States and arrived at technical communication at different points in our lives, we had similar experiences overall. Their feedback to me also pointed out how much has changed since we were the same age as the current Generation Y/Millennials.

We were the first generation where there wasn't a sense that you could start at a company and be there for your entire career—it's always been a "fend for yourself" atmosphere for our generation. We're innovative in our own way, and because we were the transitional generation, we got the short end of the stick.

The job market during the Generation X formative professional years could be difficult, but they paved the way for what Generation Y has taken for granted. Our early professional years saw more job layoffs, the rise and fall of the dot-com boom of the late 1990s and early 2000s, sexual and racial discrimination, unequal pay for equal work, and the squeezing out of women in STEM-related careers. Even when job searching, drug testing, initial telephone interviews, "temp to perm" employment were practically unheard of. Contract work was rare—you were always a direct hire until there was a layoff due to downsizing. The concept of working for one company for your entire career was gone by the time we became professionals. If we wanted to make any professional progress in our careers or wanted to have any sense of job security, we had to jump around from job to job, as we had no support from managers or mentors to help us get a leg up in our careers. We have had to fend for ourselves to not stay stagnant in our jobs.

We lived in an age when people worked in the office every day, side by side with other technical writers or documentation contributors. If you needed to find out more information about something, that person was most likely only a few steps from your desk. For us, working globally initially meant long distance phone calls with documents sent on a fax machine to initiate the global reach we know today through email, instant messaging, and teleconferencing. Telecommuting was not really an option, because for much of our careers, there were no VPN connections until the Internet truly took off.

However, in our favor, because we were the first to start adopting digital content, this made the transition into the digital age much easier for us. Boomers invented digital; Millennials own digital; we bridged the gap between those points, and still do. We were first ones to truly adopt digital. We were the young whippersnappers to take it on and do something with it, and help the transition from paper to digital. We were taught in both the old ways of doing business, and we helped create the new ways of doing business. At the time we were young adults, you didn't need a degree specifically in technical communication or a computer science degree of any kind to get into the field. Most of us came with degrees in various humanities subjects, such as history, journalism, or English. Being an end-user, or even someone with an aptitude in adaption to new technology, was plenty to get a good job. We documented operating systems as early as Windows 3.11 and networks, and helped companies transition from paper-based documentation to evolving digital platforms. We helped to usher in the dot-com age, being the first to consistently work in Web-based platforms, and again, bringing documentation and content to Web-based platforms, including mobile.

We also experienced a time when employers, eager to keep up with new technologies and not fall behind, were willing to teach our generation the basics of HTML, XML, CSS, JavaScript, and DITA to be able to work with new ways

that the Web was enabling us to document our content at a global level. Instead of writing English-centric content, we learned to write content that could easily be translated and localized to a variety of global locations. Again, our ability to adapt and our "can-do" attitude allowed our generation to push through this rapid technical evolution that's happened in a mere twenty to thirty years.

Although we have a lot of good qualities working for us, we have now hit a time in our lives when we're starting to hit some obstacles in our careers. For those of us who came to technical communication later in our careers, we found that we really couldn't break into the field or have any credibility unless we had a technical communication credential of some sort, such as a Master's degree, graduate certificate, or other certification credential. We've also found that unless you have been trained in more advanced programming codes and have many years of experience, finding a job is a lot harder. It used to be that having experience and versatile skills were an asset for Generation X, but now it seems to be working against us.

The biggest problem Generation X seems to have in the technical communication field right now—almost universally agreed upon when talking to my peers—is ageism. More and more companies seem to be edging out the experienced, tech-adaptable, practical, self-managing, and hard-working people of Generation X in favor of the less experienced but digital natives, Generation Y. Generation Y, being younger, is "cheaper" in terms of financial compensation, and they are easily distracted by perks like free food and snacks, well-paying internships, transportation to work provided by the company, free gym passes, and the ability to work from home. Yet they also tend to have more difficulty with self-managing, and need more challenges and direction to stay motivated. Generation X wouldn't mind all of those perks, too, but ultimately, as mentioned earlier, we're a generation that's used to instability, so we look for longevity, not empty promises of how a company will get bigger and better. (We already did that during the dot-com boom of the 1990s.) We're looking for benefits that will enhance the balance between our home and work lives. We're looking for good pay that's fair compensation for the hard work and experience we've gained over the years. We're also looking for the same opportunities to learn new technology that we had when we were younger instead of being shut out. We are used to learning ever-changing tools to get our jobs done, whether for writing, managing data or content, or creating graphics. We didn't have help-authoring tools when we started, like Generation Y has now. We learned everything from the ground up, so we can learn tools that are more automated now. And yet, we are shut out, and not given the opportunity to grow and learn.

Generation X still has at least another 20 to 25 years left in our working careers—perhaps more as retirement age requirements change. That's a long time! There is certainly room for all of us to work together, but to cater only to Millennials doesn't seem to make much sense. Generation X has the knowledge and experience to understand what it takes to build things from the bottom up, and the self-reliance to make things happen. We were writing for mobile before Generation Y got their first mobile phones or tablets. Sure, there are deficits in some of our backgrounds because we had to be jacks of all trades, but from an all-around perspective, Generation X can't be beat. While Generation Y might have better skills for working in open rooms and team building, Generation X knows how to focus and work alone when needed. We have more versatility that's not as appreciated now as it was earlier in our careers.

We know how to help others, and we are willing to do so. We know what to do, and we know how to create results. We know how to seek out resources beyond looking something up on Google, such as reaching out to STC or, heck, going to a library! We represent more than the majority of the workforce out there, so with all these skills and experiences, we are a resource and an asset that should not be ignored.

I promise you that a member of Generation X, no matter how far in his or her career, has a solid work ethic that is based on knowledge, innovation, and flexibility that will transcend anything a Baby Boomer or Millennial can offer.

Special thanks to Nathaniel Lim, Cindy Pao, Yvonne Wade Sanchez, Rachel Houghton, and Ed Marsh for their contributions to this article.

DANIELLE M. VILLEGAS *is a technical communicator who has most recently worked at the International Rescue Committee, MetLife, Novo Nordisk, and BASF North America, with a background in content strategy, Web content management, UX/UI strategy, social media, project management, e-learning, and client services. Danielle is best known in the technical communication world for her blog,* TechCommGeekMom.com, *which has continued to flourish since it was launched during her graduate studies at NJIT in 2012. She is currently the vice president of the STC-Philadelphia Metro Chapter, as well as co-conference chair for the STC-PMC's CONDUIT conference. You can learn more about Danielle on LinkedIn at* www.linkedin.com/in/daniellemvillegas, *on Twitter* @techcommgeekmom, *or through her blog.*

REFERENCES

Collier, Elissa. 2012. Workplace Warfare: Baby Boomers, Gen X And Gen Y. *Career FAQs: Courses & Career Resources.* Accessed 7 August 2015. *www.careerfaqs.com.au/news/news-and-views/workplace-warfare-baby-boomers-gen-x-and-gen-y/.*

Generational Differences Chart. Accessed 8 August 2016. *www.wmfc.org/uploads/GenerationalDifferencesChart.pdf.*

Keseric, Peter. 6 Jan 2015. Gen Xers: Skills, Strengths, and Shortcomings. *ERE Media/ERE: Recruiting Intelligence.* Accessed 8 August 2016. *www.eremedia.com/ere/gen-xers-skills-strengths-and-shortcomings/.*

White, Doug, and Polly White. 22 Dec 2014. What to Expect From Gen-X and Millennial Employees. *Entrepreneur.com.* Accessed 8 August 2016. *https://www.entrepreneur.com/article/240556.*

Booming with a Gen X

By JOHANNE LAVALLEE | *STC Member* and JOANNE VIDAL

shutterstock.com/ kmlmtz66

THEIR NAMES ARE JOANNE AND JOHANNE. Joanne is a Baby Boomer from Australia living in Quebec City, Canada. Johanne is a Generation Xer from Quebec who got her education in Ontario, Canada. Joanne (the Boomer) was working for a manufacturer of traffic signaling equipment such as variable message signs and arrow signs. The company sells a lot to Australia, so her background was most helpful. The company was growing fast and that's how Johanne came in to work with Joanne.

Emptying my social stereotypes bag

Working with a Baby Boomer was a precious experience. I used to be ageist. Working with Joanne helped me find out I just have issues with what past generations left us, not necessarily Baby Boomers. Joanne has issues with past generations, too! It made me realize that women Boomers don't fit the stereotypes (ambitious, self-gratifying, and career-centric) attributed to Boomer men.

I came to my current company and found Joanne as the reference on our products. She had amazing social skills and knew a lot about how the company behaves, about everybody's background. I liked her right away. Since I was a full-time, permanent employee and she was a contractor, I had the responsibility of managing our documentation team. Joanne did not seem to mind. I would take care of the admin and she would take care of me! She would warn me about how to behave with certain managers. She would teach me about our product's quirks. I would assign us the work.

We built this knowledge exchange relationship. She was an excellent reviewer in English; I had to get this done in French. So we helped each other with vocabulary in both languages. She knew a lot about our products and had excellent writing skills, and I helped her with technical writing tools and the more technical side of using Word.

My mom is almost a Boomer (1944), so after a while, I started drawing parallels. My mom used her age to say she could not learn anymore. Totally untrue! One time she visited a friend who had just gotten an iPad, and she told me in one minute how it worked and her impressions, so I kept referring to that whenever my mom used the age excuse. I knew that it was a question of interest. How could I keep Joanne interested?

One day Joanne decided to leave because she had too much work outside the company. I managed OK, I kept a contractor translator for a while and made it, but I really missed Joanne and I missed her company, too. Thanks to her, I can see myself in 20 years and be optimistic, because we got along so well. I just hope Millennials will treat me well.

The one thing I would recommend is to really listen to their needs, because someone more experienced in life than you are is perfectly capable of telling you what she needs. Just listen and ask questions until you understand completely.

Forget about articles on working with Baby Boomers; women are different. Most of them have had more than one career, they are loyal and hard-working but not really self-gratifying and career-oriented as much as men.

Another thing to remember is the words we choose. We don't all use words the same way. Sometimes someone uses a word and it has a completely different meaning to you. It was not the case with Joanne, but my mom and her friends have a completely different set of definitions!

Joanne's story

I've never really liked the term Baby Boomer. I can't see the point of labeling groups of young people, as if they all came out of a mold somewhere. We all grow and change and shape our lives in what we like to think is *our* way.

This is how I saw/see working with Johanne. We came together in an industrial factory setting, i.e. strongly male-centred and sexist. Even the company president, a woman, was known by her male nickname. I kept telling myself that my colleagues were nice men (and they are!) and that their hyper-masculinity was just a mask. I knew that if I got affronted or came across as a *lady*, then I would not last long in the job.

When Johanne arrived, it didn't take long for me to recognize that she was right for the company. She has a much more technology-appropriate skillset than me. I could write but she has a better understanding of what manufacturing the product involves.

Show me how to do it and I *will* learn!

Johanne's arrival put me into a very insecure state. She was permanent and I was freelance. She was, dare I say it, younger and, very importantly, quick and totally at ease with all the authoring software.

But she was not at ease with her new work environment. I resented what I perceived as her assumption that I was too old to learn. It had to come to a head, and it did. It says a lot for her that we managed to talk it all out and reach a place where we could work well together.

I eventually moved on and she stayed but we still work together and she is often the needle in my side to get me moving on new things, like this article and the Spectrum conference. The Jo(h)annes are still a team and the respect is mutual. We both continue to learn, challenge conformity, and keep inquiring and open minds as we move onward to new adventures.

Epilogue

The Jo(h)annes have been keeping in touch, having lunch, Skyping. Joanne is a grandmother of a boy almost the same age as Johanne's son and she gives good advice to Johanne. She also has a lot of daylilies to share. They share many values! Four years after working together, in April 2016, they decided to go to STC Rochester's Spectrum conference. They both enjoyed and got a lot out of the conference. Joanne got useful information about freelance work. Johanne got inspired to become more involved with STC. They both have fond memories of Finger Lakes, barbecue ribs, and talking back to that car GPS. 1

JOHANNE LAVALLÉE *works at Signalisation Ver-Mac in Quebec, Canada, a manufacturer of portable intelligent traffic control solutions and equipment. She has spoken at LavaCon 2015 and Spectrum 2016. She is now secretary on STC Rochester's council and volunteers for Technical Writers Without Borders.*

JOANNE VIDAL *is currently a freelance editor of academic papers and a French-to-English translator. She is curious about all aspects of life and living, and has a love of languages and people. She attended Spectrum 2016 and was impressed by the quality of the gathering.*

Onboarding Millennials:

shutterstock.com/ Rawpixel.com

From Instructive to Supportive Employee Training

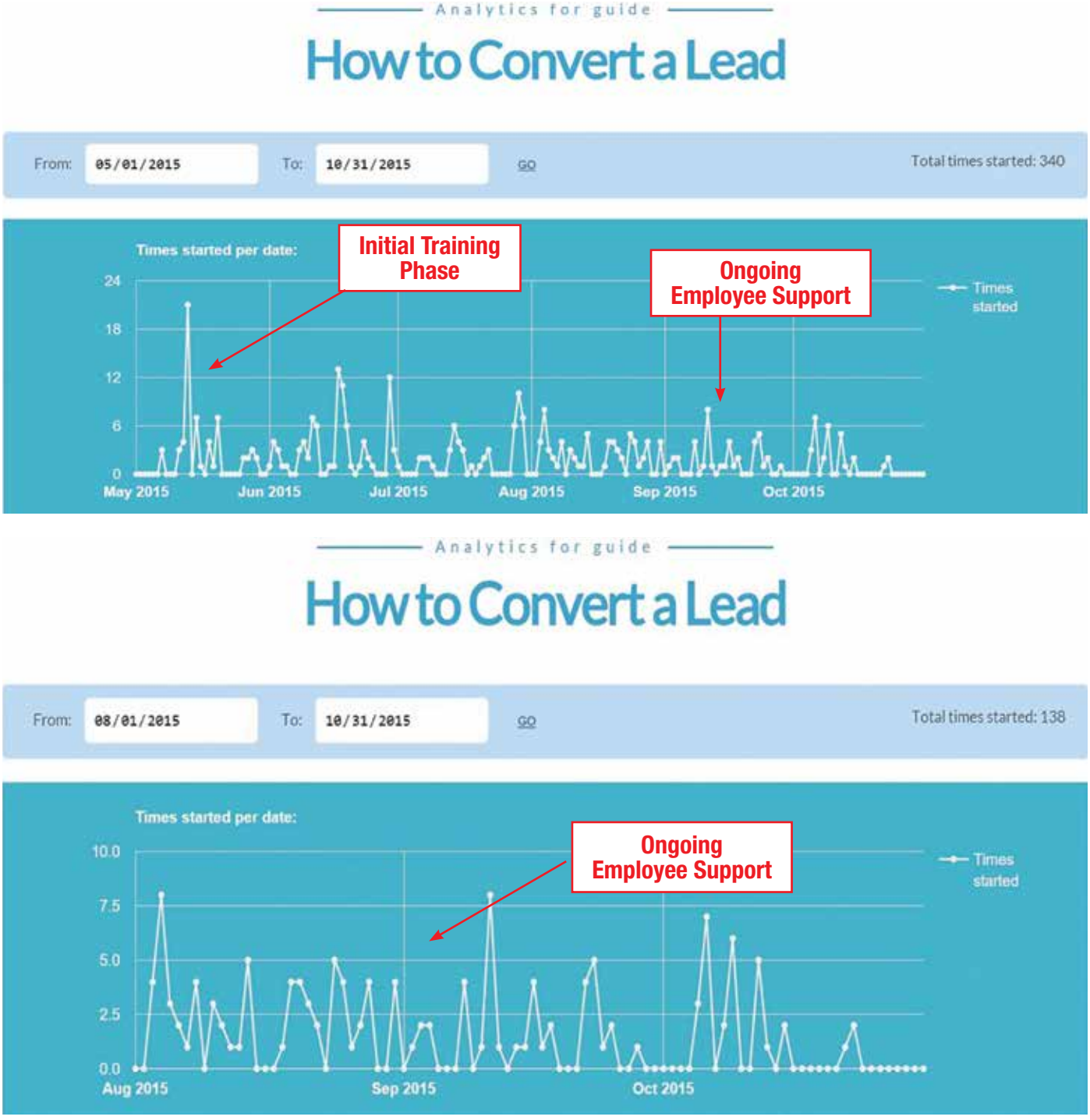
By ODED ILAN

Applying New Technological Paradigms to 21st-Century Employee Training

Quietly and almost unnoticeably, employee training practices which had been in use for decades have become obsolete. While existing practices may still be relevant to some employees, for a growing percentage of our workforce—Millennials—they have become less relevant and even a hindrance. By 2014, 36% of the workforce was comprised of Millennials (*www.kenan-flagler.unc.edu /executive-development/custom-programs/~/media/ DF1C11C056874DDA8097271A1ED48662.ashx*). This means that over a third of your workforce grew up in a world where instant communication and accessible, affordable technology were a given, a thing to be taken for granted.

When it comes to work culture, Millennials are different. Being constantly connected and used to immediate feedback, they bring a quick and vibrant rhythm to professional environments. They are digitally native, often preferring to communicate via Hangouts, chats, and instant messaging over emails or phones. Chats are actually a good example of the Millennial pace—short, laconic, and efficient (i.e., bite-sized).

In addition, their world is part of the attention economy, just like their use of instant messaging solutions which allow them to chat with several people at the same time, to accomplish more, despite being unable to fully dedicate their full attention to one single task. In 2011, the CDC diagnosed 11% of children between the ages of 7-14 with ADHD (*www.cdc.gov/ncbddd/adhd/data.html*). In 2016, this number will have increased and now includes a substantial part of our work force.



Figures 1-2. The graphs above show Iridize training guides used with Salesforce over a period of six months, including the initial training phase and the ongoing use of guides by employees.

Navigating the Digital Terrain

How do these demographic and technological changes affect employee training practices? To fully understand the implications, we must analyze the digital habits of our target audience:

- *Information Overload*: Millennials are used to consuming massive amounts of data on an hourly basis. Whether it is from multiple social channels, app notifications, content sources, or the data that drives their business decisions.
- *UI Standardization*: User interfaces for websites, Web applications, and apps have been adapted to fit an easy, intuitive norm, to the point of standardizing icon format and product features. In an increasingly competitive digital market, the only way to ensure a user's quick adoption is to provide them with a product which doesn't make them think (see Steve Krug's book *Don't Make Me Think*). Millennials, probably more than other generations, have been conditioned to certain UI trends that are friendly, intuitively familiar, and easy to navigate.
- *Immediate Response*: In this hyper-informative environment, medium-term memory is a luxury Millennials simply can't afford. They develop micro-methods, work with productivity apps and checklists, and generally outsource their medium-term memory to apps like Trello. This means accessing information only when you need it and ignoring it when you don't.

What does this imply about employee training methods in 2016 and onward?

Catering to the training needs of Millennial employees requires a paradigm shift. For starters, we need to understand and respond to these needs more attentively. In today's employment ecosystem, when employee churn rate in the United States is pushing 15%, employers are working full force to engage employees during the onboarding stage (*www.halogensoftware.com/blog/does-your-organization-have-healthy-employee-turnover*). Training is a significant aspect of that.

In a world where one doesn't actually need to learn how to use new software, because it is designed to appeal to your intuition and familiarly recognized patterns, we cannot afford to waste resources on complex, in-depth instructive courses. PDF documentation and knowledge bases begin gathering dust while quicker, more agile solutions are gaining momentum. Our new training and learning methods have to be quick, up to date, flexible, and—above all—they have to provide exactly what the users need, when they need it, even before they are aware that they need it.

Why You Should Invest in Your Millennial Employees

Apart from being your major work force, Millennials, it must be noted, are very stable employees. Despite living very ADD lives, they are very much "here to stay" once they join your workforce. If you remove the hurdles to their entry and ongoing activity at work, you will find them among the most dedicated employees who wish to better their environment and move the business forward. Millennials are a generation that thinks quickly, responds quickly, is productivity driven, and its members seek to grow with you.

What's more, in an "employee market," where quality employees are hunted by recruiters, Millennials are usually your best evangelists (as there are very few boundaries between their "work" and their "life"). They will drive your business forward and drag anyone who refuses to come with them, kicking and screaming, into the digitalized future. These are the people you want at the helm, so invest in them, and start with investing in their training.

From Instructive Training to Supportive Training

How can we manage this profound change in training methods? We need to understand that Millennial users are "conditioned" to approach new software interfaces in a natural way, rather than having to learn its use. They don't feel a need to be trained in using software, and we waste valuable time (theirs and their colleagues') by making them study it. What we need to provide them with is an agile, transparent experience for mastering new software, without actually teaching them how to use it. Rather than explaining how to use a new product, we should provide them with a platform that helps them to navigate such a product and pick it up as they go along, as part of their work schedule, when they actually need to use each feature.

Our guidelines for this change of approach should be quick, flexible, and relevant. With that in mind, employers should commission a dynamic, visually communicative, and easy-to-handle training plan focusing on the following elements.

Interactivity: Users in 2016 expect software to talk back to them, at least enough to understand their specific needs and preferences. Interactivity is a critical element in keeping users engaged and allowing them to learn at their own pace.

Figure 1. Rich content engages users—Embedding video in product support

Contextuality: Context in training is important, not only in terms of the software, but with regard to the *user*. More and more software is built on algorithms that learn user behavior and actions in order to customize the experience accordingly. Training programs can't be any different. Context is

also important for helping users manage their training navigation, by telling them where they are in the process and assisting with time management and productivity.

Figure 2. Always available—Accessible, searchable inline help

Proactivity: The shift from passive training to proactive training is also a product of technological advancement. Many software implementations are less successful than they could be, because users don't always activate the support mechanism. A proactive approach that identifies weak spots and offers assistance bypasses this challenge.

Measurablity: Data-driven, analytics, business intelligence—these are the elements that are at the core of every business that survived the 2008 financial crisis. The data from training—how successful an implementation is, how much resources are being invested, etc.—is immensely valuable to the big picture and should be aggregated wisely and segmented even more wisely.

Bite-sized: Returning to the work culture and attention span of our target employees—the Millennials—training should be regarded like chat conversations: concise, efficient, and accurate. Supportive training content can contain only "so much information." There is no use in overwhelming users with stuff they won't use instantaneously.

Figure 3. Augmented reality—In product integrated support solutions

Invest in the Right Software

Remember when we made the leap from the Stone Age corporate methods to a digital world? (We no longer use a rolodex to manage contacts, you've replaced your filing system with a CRM, and email has replaced the sticky notes on your desk.) For your Millennials employees, you need to make a new leap. Applying new technology, just as in the previous leap, is not just "nice to have" but a necessity.

Organizations need to change their training methodology to include new interactive training solutions with rich content; don't expect your employee to remember their initial training (when they joined the firm) or to seek guidance in a PDF manual. Rather give them "how-to" movies which can be accessed when needed. Organizations need to make sure content is relevant and always available to their workforce; don't expect an employee to dig through training material that includes content that is irrelevant to them or to their current needs, rather provide them with support that is user specific and relevant to their "here and now."

Using products such as Iridize (*www.iridize.com*) to provide your employees with short, to-the-point, relevant, and interactive training will not only substantially reduce time spent on training and allow you real, factual feedback and measurement of the training worth, but it will actually keep your employees happy and sure of their positions by providing an assistive work environment that answers to their needs, *when* they need it, with answers that are relevant to them and their roles.

Looking to the Future

In an interview for *CLO Magazine*, Kelly Palmer, CLO of LinkedIn, stated that "Learners today are overwhelmed by content. Learning technology should reduce their stress by curating, personalizing features to get them what they need exactly when they need it." Kelly also stated that while LMS platforms can manage training, they are no longer sufficient as the platform which delivers the content itself. The market is responding in queue by delivering more and more adequate solutions. We see a rapid growth in training technologies which offer richer content, product specific guidance, and personalized training material (*www.clomedia.com/media/videos/play/299*).

Organizations, to remain competitive and to reduce the time and cost spent on onboarding their workforce, have started to implement these new solutions, not only to increase profit, but also to be attractive employers and to ensure employees remain happy in their day-to-day tasks.

Even before ODED ILAN (oilan@iridize.com) *had graduated from the university in 1999, he spent four years as a high school teacher. Following graduation, Oded worked in various high-tech industries as a business developer. He still believes that his hardest "sell" to date was convincing children to "purchase" education. Getting the message across, creating appealing yet meaningful content and delivering the correct story to the customers, has always been a passion of Oded's. As Iridize's Chief Marketing Officer, he gets to see, first hand, how technology helps the training and documentation landscape with a new approach.*

Don't Edit, Teach:

shutterstock.com/ Monkey Business Images

Strategies for Mentoring Writers from a Writing Professor

By JESSICA MCCAUGHEY

A FEW TIMES EACH MONTH, I get a familiar call from an unfamiliar organization. The person on the line offers some variation of the following statement: *My employees can't write.* Sometimes it's framed as a minor issue, as in, "Some of my staff have a few kinks to work out in their writing." Other times, it's harsher and less appropriate: "These guys couldn't write their way out of a [explicative] paper bag."

I teach first-year writing at a university in Washington, DC, and I also facilitate professional writing workshops for private sector and government clients. Some days I split my time between local office conference rooms in the morning and my classroom in the afternoon. In the evenings, I might comment on student papers for a couple of hours, and then shift to evaluate the writing in government reports or inter-office memos. It's an odd situation, residing in both the academic and the corporate world, especially as I consider the writing that happens in each. What is most striking to me as I shift back and forth is how many of the issues managers see in their employees' writing mirror those I see in the college writers I teach. The writing they're doing is often very different, but the tasks and techniques that these writers in the workplace struggle most with are surprisingly similar. I often find myself responding in similar ways to both groups.

Editors are, in many ways, by default, the "teacher" when it comes to employees' writing. They "assign" writing, provide feedback on their work, and can "pass" or "fail" the writing that lands on their desks. And as each of the managers and editors calling me about their staff can attest, that role can be a tricky one. But there are things they can do to be better teachers and managers.

View Writing as a Process

Every good writer knows that the first draft of any piece of writing rarely resembles the polished, final version. (I often suggest that my new college writers read Anne Lamont's wonderful book *Bird by Bird*, especially the chapter called "Shitty First Drafts" to really drive the point home.) Writing is iterative, and a text reaches its full potential through multiple drafts, feedback, revision, and editing. In first-year writing courses, the process is built-in. Students are often required to show their pre-writing work, such as notes and outlines, to submit multiple drafts, and then to return to them and revise in order to get into the habit of understanding writing as the process that it is, rather than a one-time event.

In the workplace, though, we often feel so crunched for time that the idea of process goes out the window—and the result is usually less than stellar writing. Even though your employees' projects may not always allow for a leisurely, unconstrained feedback and revision loop (okay, they never do), you can help them build the writing process into any project, whether that means starting earlier, having a colleague read through their work, or, at an absolute minimum, asking your staff to step away from a full draft of a piece of writing for a half hour before returning to it. If you emphasize revision with your staff, the results will be obvious to both you and them, as well as to the outside audience that the piece ultimately reaches.

Know Your Context

Most writers know this, but it's easy to forget, especially when a professor isn't constantly reminding you; every piece of writing has specific parameters that are determined by its rhetorical situation. People talk about this term in different ways, but I tell my students, at the most basic level, that the *writer*, the *audience*, and the *purpose* should be clear before they ever sit down to write—and that these three elements that make up the context of a piece of writing will dictate just about every decision they make as the writing develops, such as tone, style, format, and the ways in which they makes argumentative appeals. It's your job to remind your staff to learn and consider the rhetorical situation *before* they sit down to write.

Be Clear About the Prompt

When a student or two is really struggling to produce a successful piece of writing, I meet with them one on one, but when the whole class is? I revisit what I asked of them. I try to pinpoint what they're not getting, and then I figure out how my *own* writing and explanations in the assignment sheet can be clearer. Employees who aren't meeting your standards should be given the same benefit of the doubt. Are you making assumptions about prior knowledge the writer might have about what form or tone the piece should take? If so, think about ways you can more clearly state the requirements. For new employees, those who speak a first language other than English, or those who struggle with writing for other reasons, no level of detail is too specific.

Know What You Value—and Be Sure You're Valuing What's Actually Important

On the first day of my writing courses, I explain the difference to my students between *higher-order issues*, which include concerns of argument and organization, and *lower-order issues*, like grammar and punctuation. They are initially pleased to hear me say that I care way, way more about their higher-order concerns (I'm teaching them to develop a written argument, so their critical thinking skills, thesis, and evidence are front and center)—then they realize that these are way more difficult to master than where to place a comma. When many managers complain about the quality of their employees' writing, they're actually talking about their grammar and usage. These are important, as anyone who's ever been distracted from a report by the writer's improper use of apostrophes can attest, but they're far less important than the actual substance of a piece of writing. As a manager, you need to make that distinction and coach your employees to improve based on what their actual issues are.

Written Feedback from "The Teacher" Is the Most Useful Tool, Unless It's Not…

Sometimes I receive writing from students that is simply a mess, just like some employee writing is. It's disorganized and unclear. It's difficult to follow and grammatically troubling.

It lacks transitions (or, as in one very disturbing case early in my career, capital letters). Written feedback from the professor is crucial in helping writers develop. However, the art of providing feedback isn't one that's easily mastered. When I first started teaching, I covered the page with so many comments that my students felt overwhelmed. I made notes that they couldn't understand. I had to make a devoted effort to improve the feedback I was providing. And in the years since, I've worked with many managers who, despite providing feedback to their writers, aren't sensing any improvement. When I ask to see some of their written comments, I often find the same thing: Notes that provide no specific issue or clear inquiry, such as those that read, "Reword" or "Unclear." Questions are key. While you may be tempted to write "This doesn't make sense" in the margin, the revision is going to go a lot better if you write "Are you trying to say X or Y here? Or something else entirely?" Here's what is easy to forget: This writing makes sense to the writer. So feedback needs to be specific. Pick and choose your issues—you can only ask a writer to process so many suggestions at a time. Maybe this means you'll need to take a look at an extra draft and provide your lower-order concerns then. That's okay, and it will be a better revision based on your focused, iterative feedback. (Also, try to avoid using a red pen! It brings many writers back to their dreaded high school days!)

Put Your Phone Away

Substantial, complex writing requires a sustained, deep focus that's difficult to attain when one is distracted in the classroom—or the office. Urge your employees to set aside uninterrupted time for their more complex writing tasks. Urge them to turn off their ringer and disconnect the computer's wifi temporarily. You might even consider offering up a conference room or other quiet space for "writing hours"—time that multiple employees can designate to get away from their desks and tackle a complex writing project. They'll be more focused and you'll be able to really demonstrate that you value the kind of strong writing that takes concentration.

Peer Review Works

Peer review—that is, having students read and provide feedback on one another's writing—has been a staple of college writing courses for decades and is crucial to writers as they develop and practice writing for an audience. Student writers benefit immensely from peer review, so why don't more managers implement a similar system in the office? Many fear that the writer will receive "bad" feedback and it will actually make the writing worse, but as we all know, learning what feedback to take action on and what to disregard is just as crucial a skill. And most often, writers receive genuinely useful feedback that improves the writing during the next stage of revision. Further, we find that even writers who struggle with their own work often give insightful, helpful feedback—and by *giving* this feedback, they learn to be better readers of their own work.

Talk One on One with Writers

My classes meet three times each week—twice in person and once online. I create intricate lesson plans for these class sessions that include a combination of interactive lectures, in-class writing, discussion, and partnered and group work. If I'm lucky, I leave feeling like the class was a success, but even on my best teaching days, there are students who don't quite get it or need a little extra help. I require my students to meet with me individually to discuss their writing twice over the course of the semester. Those meetings take over my whole week, but I often see that students' writing improves more as a result of those focused twenty-minute sessions than they do from a week's worth of classes. I think of team meetings at the office a lot like class. A manager might run a heck of a meeting, but it's often those brief, focused individual meetings that really push employees to improve. And this is especially true when it comes to writing. The more time you can find—even five minutes here and there—to discuss an employee's writing with them, the more time you'll save in editing and commenting down the line.

Collect and Distribute Resources

Despite my best efforts, every semester there are students who simply need more help than I can provide, and so I keep a running list of great websites, books, articles, and YouTube channels on specific writing-related topics. After a one-on-one meeting where a student and I have discussed a higher-order issue, for instance the evidence she is using, I might also have noticed that she is struggling with conciseness, so I'll send her a link to some great online exercises to help her. You should do the same for your employees—and crowdsourcing them can help. Whether you can tell from their writing or not, your employees are likely doing the occasional Google search for help with various writing issues. Ask your team to send along any useful links they come across, and then you can use these to help other employees in the future.

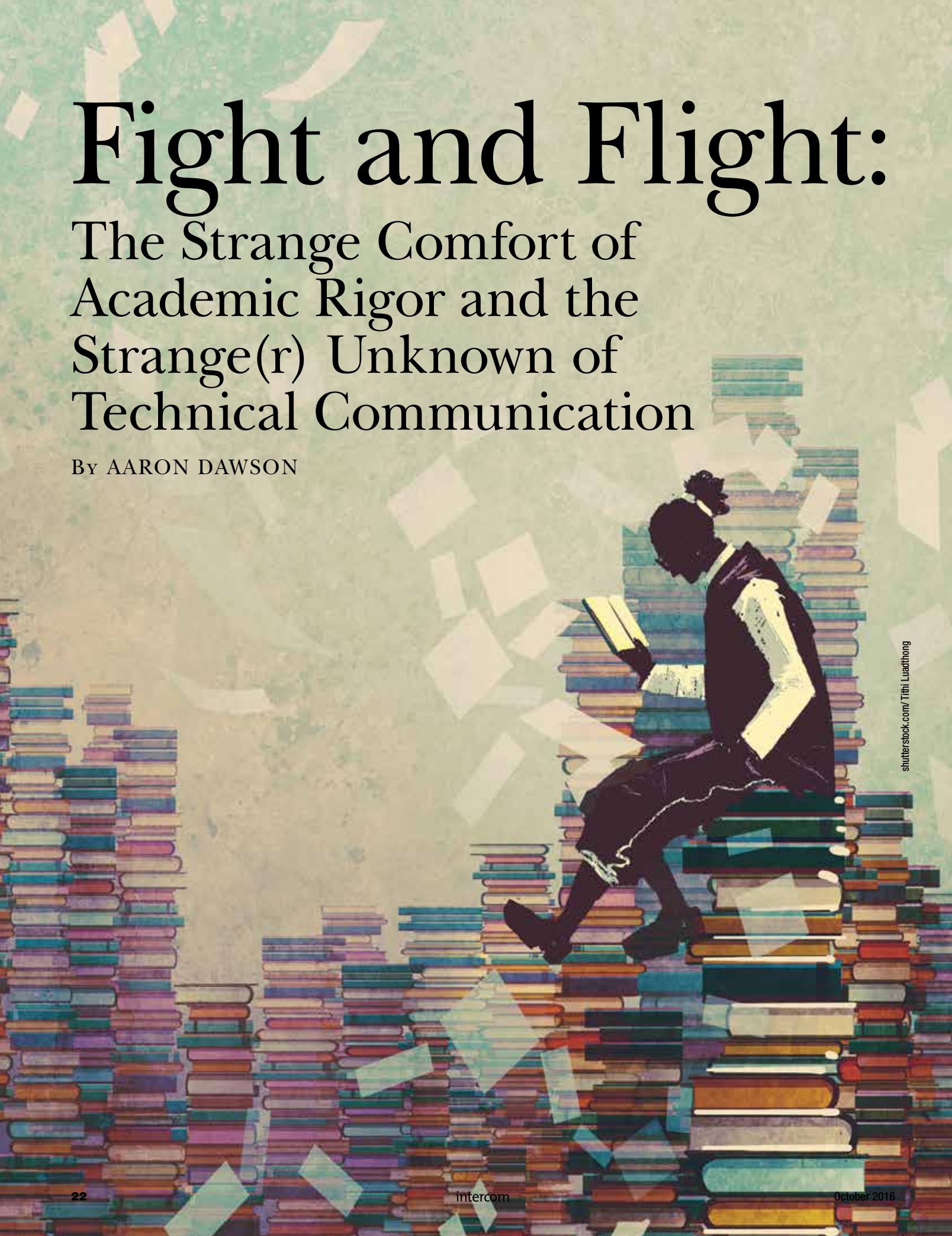
The writing your employees create is obviously unique in many ways. There is a specific audience, purpose, and culture they are working within. There are branding and style issues to consider. Ultimately, though, the way you oversee and support the writing that goes on in your organization not only affects the quality of that written work, but also the development of those writers, whether they're sending off a quick email or writing a complex report. If you say writing is important, show your employees that it's a priority. They'll thank you, and their writing will improve.

JESSICA McCAUGHEY (jessmcc@gwu.edu) *is an Assistant Professor at George Washington University in Washington, DC, where she teaches academic and professional writing. She also developed and oversees a professional writing program at GWU that provides workshops and coaching to writers in the workplace. In her previous life, she worked as a copywriter, editor, and communications manager.*

Fight and Flight:

The Strange Comfort of Academic Rigor and the Strange(r) Unknown of Technical Communication

By AARON DAWSON



shutterstock.com/Tithi Luadthong

Resisting the Siren Song

I have paid my dues interning here and there, presenting at conferences, meeting foreign language requirements, jumping at the most benign copyediting opportunities just to get some skin in the game. I wanted the life of a technical writer and I worked hard to get it. So when settling into a NASDAQ-traded global payments company as an information developer, I should have been over the moon, right?

As much as I enjoyed being rewarded for my studiousness, something was amiss. I struggled to discern if the voice calling me back to student life was the sweet song of nostalgia or a wakeup call reminding me that change, while uncomfortable, can be good.

As vessels and compilers of new knowledge, technical writers take especially well to tutelage. But how can we meet the call of independent education and self-enrichment after the motivation to do so may no longer be in our best interest?

Fortunately, there's a solution: By indulging the stimulus to learn for learning's sake, we can take our tech writing skills to the next level while scratching the itch of constant edification and self-betterment that continues to linger after formal education ends. Here are some thoughts on scratching that itch.

The Technical Writer as a Lifelong Learner

The statement that technical writers are lifelong learners may be a sweeping generalization, but one hallmark of the technical writer is the celebration of constant edification. Rather than a penchant for the one-note idea, we find depth in the farthest reaches of our wheelhouses. The flavors of knowledge apt to appeal to us are many—for example, the complex worlds of solar panels or digital gaming or petroleum engineering. We share the same neurons that reward the curiosity of intricacy, of inner-work, of under-the-hood beauty.

What better place for a technical writer to feel at home than academia, where the modus operandi is pure intellectual enrichment? As a species which thrives on the curation of knowledge across many disciplines, the fish of the budding technical writer takes to its water.

And it's here that the siren song of the academy can lull as it insulates us. Due to its premeditated scholastic plan, life is more or less charted. The likelihood of decision-fatigue is low. You are armed with the wits of theory among only flirtations of practice. In the meantime, you're exercising your brain and acquiring new ways to critically examine your surroundings. What could be better?

As rewarding as intellectual heavy-lifting is, at some point, the tassel is positioned to the left side of the cap. We trade in the safe, structured comfort of the academy for the unknown and volatility of the industry.

This trade, though, can feel like going home with your first used car. When transitioning from student life to professional life, opportunities to learn for the sheer sake of learning seize up. How do we jumpstart the process of defining our professional selves outside of erudition? How can we begin to separate ourselves from an identity so tethered to the practice of synthesizing scholastic information?

The Need for a Sustainable Practice

Being a lifelong learner, or at least an individual who values education, presents a challenge to the workaday routine. The acquisition of new knowledge feels as necessary as a morning cup of coffee. I suspect for many of us, leisure reading has historically filled this role.

Many of us love curling up with a great book, but it's unlikely that the power of fiction or nonfiction will scratch the itch that motivates enrichment and learning. We like challenges without finish lines—language acquisition, gardening, and music performance come to mind. What is more limitless than the journey to sustain that moment when, like a melody you've heard somewhere before but can't quite place, you encounter in a book a truth you've always tried to privately acknowledge, yet haven't been able to shape on your own?

We need to replace the impermanence of these moments with a sustainable practice. A practice that rewards building on an established base of knowledge. The marriage of professional knowledge and personal self-enrichment will look different for everyone, but there are commonalities:

- **It's transferable.**
  It gives new meaning to work-life balance. By performing this knowledge on the job, you actively upend the definition of work due to the residual rush of its self-betterment.
- **It participates in or identifies with a rising industrial trend.**
  "Trend" doesn't have to be a vulgar word. Our industry is unlike others with regard to pace (fashion and social networks, most notably). Trends, or patterns in the technology that we use to produce user assistance, can develop at a manageable pace while inferior tools are eliminated via a kind of Tech Darwinism.

The cross-pollination of self-betterment and professional development will be especially helpful for those of us whose institutions of learning are not too far in the past. But technical communicators at any level can port this practice into their own approach to acquiring new information.

You'll find many education and enrichment opportunities that share the above criteria, but the following are a few to get you started.

1. Markup as a means to empathy.

Even if you're not actively using HTML and CSS to develop your user assistance (UA), having a familiarity with markup is still helpful. Authoring structured content often involves working with tools whose syntax resembles HTML. This is certainly true of DITA, a markup language many technical communicators use to author their content.

Most importantly, though, possessing a background in markup enables you to shift perspective when you find that the capacity for empathy would strengthen your ability to collaborate, namely with developers. Positioning yourself to value information like developers do—black and white, task-oriented, syntactically immaculate—affords you the opportunity to acquire an entirely fresh angle regarding UA design, how its content is hierarchized, and how well that UA appeals to the audience.

In other words, learning a markup language, while enjoyable and challenging in its own right, furnishes a richer and deeper understanding to the content that you're producing. And that's never a bad thing.

2. Telling stories to ourselves, telling stories to others.

While perusing LinkedIn recently, I noticed a pattern. Many connections listed "Storyteller" as the role they filled for their organization. Storytelling is certainly trending, but how is storytelling being used in the workplace?

I chalked this pattern up to runoff from what has made podcasts so popular in the past decade. Programs like *The Moth* and *Risk!* collect stories based on a theme and capture the performance of those stories, which are sometimes loosely improvised, as told to a live audience. With storytelling groups popping up all over cities in the United States, we have access to a new medium that packages the human experience in diverse voices on a massive scale.

At storyteller meetings and events, you play language-oriented improvisation games, present stories based on a theme, and offer feedback if a storyteller invites it. We can certainly check the self-enrichment box here, but how can we benefit from storytelling in a way that extends to our professional lives?

Some of us may believe that extemporaneous performance belongs strictly to the arts (free jazz, ballet, comedy). But thinking on your feet is the calling card of an exemplary problem solver. In addition to improving your agility in the throes of complexity, grounding your headspace through a narrative lens can appeal especially to technical communicators who use user stories to connect with their audience.

We learn early on that in the industry of technical communication, audience is the name of the game. Whether you're using personas, user stories, or doing user research to connect with your audience, foregrounding the user's experience as a story—with traditional narrative elements like a beginning, middle, and end—bring a holistic dynamic to connecting us with our audience.

3. Nuance instead of the new thing.

For many of us, there's a tendency to immediately advance to another challenge on the heels of competency with a new skill (a piece of software, for example). This disposition perhaps has its origin in the bullet-list culture of which the résumé genre reigns supreme. This tendency is natural. The logic and culture of our industry motivates us to stay relevant with the tools our peers use to create UA. Participating in discussions predicated on the fluency with which you can discuss a specific skill can create a sense of community and dialogue among fellow technical communicators, which helps identify what needs our audiences share.

The problem is that within this feedback loop (the loop of achieving competency and then moving on to the next challenge, and repeat), there's no satiation. Even if the no-finish-line appeal of competency with coding languages, database management, API writing, and other relevant skills tempts us, we will always run the risk of burning out. No matter how inherently gifted we are or how quickly our minds adapt to new information, there's always another skill gap to fill.

Escape from the loop comes when we embrace the idea that testing out and moving on is a rabbit hole. Digging in and finessing our newfound skill guarantees a thoroughness and understanding which will be more readily transferable and ingrained than simply grasping the basics and moving on.

Nuance is an odd confluence of professional development and self-enrichment because it's less concrete than learning DITA or developing a practiced yet improvisatory approach to problem solving. But insofar as these other skills are a means to an end, prioritizing nuance is independent of any means. Being an effective technical communicator is less about the skills under your belt (or bullet-listed on a document) and more about your ability to evolve and adapt, to collaborate, and to think dynamically through challenges.

Conclusion

Throughout this article, I've bracketed professional development and the drive to consistently enrich our intellectual lives with something other than labor. However gratifying, this drive to learn can be a kind of work itself. Just because this drive seems encoded in our chemical makeup doesn't mean that fostering it is a walk in the park.

Two of the items above seek to strengthen the capacity for empathy. This is difficult because the recipient of our empathy, like a developer, can operate on another continent. Alternatively, the persona as a recipient of our empathy is a difficult target because non-existence is the reason for their abstraction in the first place. The other item, nuance over just competency, functions as a rude hand gesture to the performance-driven instinct that encourages us to, like a horde of locusts, devour *most* of a piece of content and, afterward, move on to the next thing.

Fighting this instinct can feel like fighting the essence of our work ethic, our own code of production.

R. AARON DAWSON (aarondawson.work@gmail.com) *is a technical writer based in Charlotte, NC. They read a lot of music journalism, drink very dark coffee, and often delete space on their phones to make more space for even more podcasts.*

Cash in on Your Financial Editing Skills

shutterstock.com/ Dmitry Natashin

By JESSICA KREGER | *STC Senior Member*

YOUR TECHNICAL EDITING SKILLS can be an asset in the finance industry. Find out how to cash in and apply your skills in this profitable field. Learn the basics of a technical editor's job in finance. Review general editing guidelines, plus specific writing examples that are acceptable from a regulatory standpoint. We'll cover the roles of U.S. regulatory agencies, writing for an international audience, and resources for maturing your financial industry knowledge. This paper will add to your knowledge of this high-interest topic, by summing up the wealth of editing opportunities the financial industry affords.

My job is to manage the technical documentation team at TradeStation Technologies, an award-winning online brokerage firm based in Plantation, FL. My technical documentation team and I empower traders by accurately documenting the cutting-edge technology that TradeStation provides, and by describing the complex financial information customers need to succeed. With the right training and using the tools and techniques described in this paper, you too can learn how to reap dividends in the financial world, by honing skills you already have as a technical editor.

Figure 1. Multi-channel trading through desktop, Web, and mobile apps.

Writing for Traders

Before you begin technical editing for any financial product, it is essential to learn about the clients and markets. For example, my company, TradeStation, offers multi-channel trading through desktop, Web, and mobile apps, as portrayed in Figure 1.

We specialize in three asset classes: equities, options, and futures. We pioneered EasyLanguage, an object-oriented programming language that clients use to customize their trading strategies, and also offer a TradingApp store, an online marketplace where you can create, find, and share apps.

Our laser focus is on active traders, and our objectives include: supporting our business goals, informing clients on product usage to empower them to trade now, and enhancing client satisfaction for retention. We produce context-sensitive help for all of our platforms (see Figure 2), and also provide printed quick-start guides and client FAQs. We document EasyLanguage for advanced traders, as well.

We work in an agile development environment in two-week sprints and use the MadPak Professional Suite by

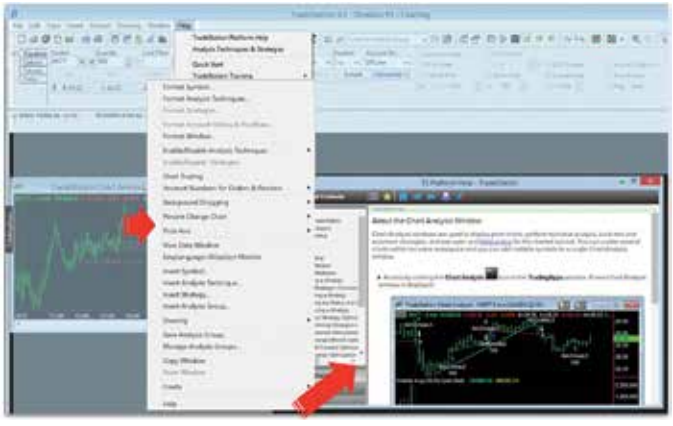


Figure 2. Context-sensitive help for TradeStation's desktop platform, depicting how right-clicking on a chart displays a chart analysis topic.

MadCap Software. I presented at the MadWorld Technical Communication and Content Strategy Conference in April 2016 in San Diego on translation management.

Editing Guidelines

My team and I support our clients through reference material. My team does not communicate directly with our clients or offer brokerage advice, because our help writers are not registered brokers. We do not purposely offer any suggestions, as you can see in the following examples of user documentation:

- ✓ "To place an order, enter a symbol in the Symbol box and click *Buy*." This is acceptable, because it is telling the client how to use the tool.
- ✓ "To place an order, enter a symbol in the form of AAAA in the Symbol box and click *Buy*." This is acceptable, too, and is even better. AAAA is an example of a symbol and provides useful instruction in the format the client must enter.
- ✗ "To place an order, enter <pick of the day> in the Symbol box and click *Buy*." This is not acceptable. We can't suggest what you should buy.
- ✓ "Trading hours are 9:30 a.m. to 4 p.m. Eastern Time." This is acceptable.
- ✗ "The best time to trade is <pick your favorite time>." This is not acceptable. We can't suggest what time you should trade.

Style Guidelines

On a day-to-day basis, I write and I edit just like other writers do. These additional style guidelines will be familiar to you.

We maintain a user-focus (we focus on active traders) and use a topic-based approach. This means using the tools of information architecture to chunk information into digestible topics.

Like journalists, we use the inverted pyramid approach to put the most important information first in any topic. When possible, we user test and mine analytics to continuously improve our documentation based on what our users search for. Usability gurus Susan Farrell and Jakob Nielsen recently released a new book, *User Experience Careers: How to Become a UX Pro, and How to Hire One,* that includes valuable advice for developing user experience (UX) skills, both formally (in the classroom) and informally (outside of school).

You may have noticed that in the past few years some of your bank and credit card statements have become easier to read and lot less cluttered and less wordy. That is because there is momentum in the industry to use plain language, an active conversational tone, and Simplified English. To learn more about streamlining your style, see Ginny Redish's book *Letting Go of the Words, Second Edition: Writing Web Content that Works.*

Beyond the words, in financial editing we try to avoid chartjunk, a term Edward Tufte coined in his seminal book *The Visual Display of Quantitative Information.* Chartjunk refers to extraneous information, such as distracting colors, symbols, and lines that take away from the purpose of a chart. Tufte's newer book, *Beautiful Evidence,* is another great resource for elegantly explaining and presenting data.

Market Breadth

Although many editing guidelines are the same throughout the finance industry, the industry itself has many different options on the chain. Within the finance world, there is tremendous market breadth. There are different tools, audiences, and products to take stock of for trading, financial advising, banking, credit, mortgage, accounting, and more. And there's a whole new industry called FinTech, short for financial technology, creating new business solutions, ensuring opportunities for technical writers.

Industry Knowledge

Launching your professional network can help you chart your path. You never know where you might end up. For example, one savvy investor, Laurie Itkin, became a money manager as a second career, wrote a book *Every Woman Should Know Her Options,* and is now known as the Options Lady for her work educating women to become successful investors.

In addition to the Society for Technical Communication (STC) and the Technical Editing Special Interest Group, I have also belonged to the International Association of Business Communicators (IABC). Like STC's Certified Professional Technical Communicator (CPTC) program, they are developing a new ISO certification program, following international standards. The Association for Women in Communications (AWC) is a broad group for women in all disciplines in communications.

Market Depth

To learn specifically about the finance industry you have to invest your time, but it's worth banking the hours to get to the top. Keep wearing that investigative journalist hat, and ask questions. If you already work in finance, shadow people in all of the main departments in your company for an hour—my company calls these shadowing sessions *ride-alongs.* You'll learn about the business, the industry, and the clients. Find a mentor to teach you.

On the micro-economic scale, one of the trickiest parts to any new industry is mastering the acronyms. Make your own glossary or find one that defines terms that are specific to your niche. You'll need to master these to understand the concepts behind them.

On a macro-economic scale, I've found watching the finance news stations to be an easy and fun way to keep a pulse on the industry. You can also check out publications like *Barron's* for general market knowledge, *Investor's Business Daily (IBD), Bloomberg Markets,* and tutorials or videos on areas on which you want to focus.

If you're interested in transitioning to the finance industry, you might want to scout the job descriptions online and develop the qualifications you need to diversify your editing portfolio. To learn the lingo, you could join

an investing club or enroll in a program like the Online Trading Academy, which teaches investing and trading using the TradeStation platform, online or onsite. Additionally, TradeStation has its own University with videos, a daily market briefing, webinars, and more (see Figure 3).

Figure 3. Educational resources for all levels of traders.

Regulation Nation

You may need to watch and create many instructional videos to ramp up your financial knowledge and share it, but when you're an editor in the finance industry, your clients and potential clients aren't the only ones watching you. There are several regulatory agencies in your audience. Here are a few examples of regulatory agencies:

- Commodity Futures Trading Commission (CFTC);
- Financial Industry Regulatory Authority (FINRA);
- National Futures Association (NFA); and the
- Securities and Exchange Commission (SEC).

We can tell our traders what the features of our platforms are and how to use the tools, but they use them at their own discretion and risk.

Global Economy

Although we live in a regulation nation, we operate in a global economy and empower active traders around the world. Monex, TradeStation's parent company, is based in Japan, and we have international brokerage partners that are regulated by their own exchanges. We manage multiple language versions of our software with different features and help systems for each (see Figure 4).

Figure 4. Order Bar topics in English, Chinese, and Japanese.

A Wealth of Benefits

Working with a geographically dispersed team both in the United States and abroad is exciting. The most important thing to remember is which time zone everyone is in. And there are a world of other benefits to cash in on when working in the finance industry. You're around educated, fun people, and you're always learning and growing. Keeping your mind sharp is one of the highest dividends in my book. Since no two days are ever alike in the market, you're always on your feet. And to me, that's a major asset.

JESSICA KREGER (jkreger@tradestation.com) *leads the technical documentation team at TradeStation to publish information that empowers active traders around the world. With over fifteen years of experience in communications, she has worked at Dell, the University of Miami, Carnegie Mellon University, and Alcoa. Jessica is passionate about creating optimal user experiences. She earned an MA in Professional Writing from Carnegie Mellon and a BA in English from Penn State. She is an STC Senior Member and belongs to the Technical Editing SIG.*

RESOURCES

Barron's (3 August 2016). *http://www.barrons.com.*

Bloomberg Markets (3 August 2016). *www.bloomberg.com/market.*

International Association of Business Communicators Certifications (3 August 2016). *https://www.iabc.com/professional-development/certification.*

Investor's Business Daily (3 August 2016). *http://www.investors.com.*

MadPak Professional Suite (3 August 2016). *http://www.madcapsoftware.com/products/madpak.*

MadWorld (3 August 2016). *http://www.madworldconference.com.*

Online Trading Academy (3 August 2016). *http://www.tradingacademy.com.*

Society for Technical Communications, Technical Editing Special Interest Group (3 August 2016). *http://www.stc-techedit.org.*

TradeStation University (3 August 2016). *http://www.tradestation.com/education.*

REFERENCES

Farrell, Susan, and Nielsen, Jakob. *User Experience Careers: How to Become a UX Pro, and How to Hire One* (West Conshohocken, PA: Infinity Publishing), 2016.

Itkin, Laurie. *Every Woman Should Know Her Options* (San Diego, CA: The Options Lady Press), 2014.

Redish, Janice (Ginny). *Letting Go of the Words, Second Edition: Writing Web Content that Works* (Waltham, MA: Elsevier), 2012.

Tufte, Edward R. *The Visual Display of Quantitative Information* (Cheshire, CT: Graphics Press), 2001.

Tufte, Edward R. *Beautiful Evidence* (Cheshire, CT: Graphics Press), 2006.

Technical Writing by the Numbers

By BRIAN LINDGREN | *STC Fellow*

shutterstock.com/ Bloomicon

NUMBERS DIRECTLY CORRELATE to technical writing, and how to handle numbers in text has probably been debated since the first written languages. As with words, it becomes very distracting if numbers are used in a way that is unusual or uncomfortable to the reader. If an article is laden with typographical errors, the reader can lose focus, and it weakens the credibility of the content, because if the writers and editors were this sloppy, how thorough is the research? The same is true with numbers.

One phrase I find unsettling is "a number of." What exactly does that mean? Five is a number; so is 100. People who say "a number of" (or the even more unsettling "any number of") will argue that it means several or a few. Note that either *several* or *a few* contain less characters than *a number of* and either allows better visualization of an amount.

A convention many of us follow is to spell out numbers one through nine then use digits for 10 or above—exceptions to this include using digits if it's a particular value (e.g., 5 inches, 6 millimeters) or spelling out the number regardless of value if it starts a sentence. Lawyers and other technical writing deviants will, for emphasis, often spell out a number then follow it with digits in parenthesis. You've probably seen this six (6) times today already. Obviously for any math- or science-related documents, numbers can be integral to content, and in these contexts digits alone will be the default.

Tweaking numbers to make a point is certainly nothing new. For decades, U.S. gas stations have had gas prices in 9/10 of a cent to make it sound lower, and this apparently still works. A specific metric such as 48% can be described as "less than half" or "nearly half," and depending on tone could be used to subliminally sway an audience. A stronger showing, 76%, could be propped up as "more than three quarters of individuals" or the opposition might say "nearly a quarter of those polled disagree with this." Speaking of polls, we can summarize metric manipulation in two words: Presidential campaign. There is one in the United States this year, in case you haven't noticed.

In this article I'll take a look at a few instances where the use of numbers was misguided.

Nothing to Sneeze At

The ad campaign for Flonase allergy medicine is a real piece of brilliance. When comparing Flonase to other allergy medicines, they note that Flonase addresses six symptoms as opposed to just one. That is good. Then they presume that isn't clear enough, so they add "Six is greater than one." Well, sure, unless it's *six* hundred dollars versus *one* thousand. I'm reasonably certain they're talking integers here. But the slogan isn't finished. In its entirety, it is "Six is greater than one and that changes everything."

It sure does change everything. I actually had two unsuccessful runs for the position of STC Treasurer. Had I known that six was greater than one, I surely could have upped my game. In fact, during my second run for treasurer in 2014, I got so many fewer votes than the winner, Jane Wilson, but also fewer than anyone who ran for STC board that year. I believe I was directly responsible for a surge in STC membership because, based on the numbers, new members were joining STC just to vote against me.

But I digress. I'd actually be curious to know who greenlighted a multimillion dollar ad campaign based on "six is greater than one," and if that is even effective worldwide. Did a committee come up with the line? Was it a vote by majority rule? Since the campaign has been ongoing, the writers behind that metric apparently retained their jobs. Whoever wrote that line is someone I want on my team, because shortly after convincing Flonase executives that it was a winning slogan, he/she probably sold them a bridge that went all the way to Brooklyn. This is who I want on my team when I'm pushing a business case.

Tiresome Metrics

Buying tires used to be a technical writer's dream but everyone else's nightmare. Well, not necessarily buying the tires, but getting the price quote. That was like a virtual exploded-view diagram: "It costs $X for the tire, $X for the valve, $X for the stem, $X to have the tires mounted and balanced," etc. I'm sure some tire shops even costed out the air that filled the tires and the energy required to torque the lug nuts. The problem is these virtual exploded-view diagrams were enough to make one's head explode when a quick fix was needed to eradicate a blowout. Fortunately, in recent years getting an out-the-door price for new tires has become less painful.

This is not to say that tire pricing has gotten any better or more logical. Several tire shops run promotions like "Buy three tires, get one free." Sounds like a good deal, but conventional wisdom tells us we should replace tires in pairs, that the front tires often wear differently from the back tires; this is why a tire rotation during an oil change is a good idea.

It's a safe bet that not many tire buyers are thinking, "Well, as long as I'm buying two tires, I'll buy a third." A much more logical approach would be, "Buy two tires, get the second pair at half price." Money-wise this is exactly the same as four for the price of three, but it opens more doors; it leads the buyer to think about the more logical replacement of pairs, and might even spur the thought of getting the second pair for another vehicle, which could in turn lead to more business. It's also logical because other major retailers of items with rubber bottoms—shoe stores—frequently use the promotion "buy one pair get the second at half price." Stated differently, it could be, "Receive a 25% discount when you buy four tires."

Electric Hand Dryer

The electric hand dryer in the locker room of my gym was really what inspired this article. Full disclosure: since advertising has been a focal point of this article, the establishment to which I refer has the slogan "We're not a gym." Fair enough. They also claim to be a "Judgement-Free Zone," although I have always judged them for putting an "e" after the "g" in *judgment*. But once again, I digress.

Wall-mounted hand dryers usually have printed instructions to the delight of the technical communicator in all of us. The instructions typically read:

1. Press button
2. Rub hands together under air flow
3. Dryer stops automatically

The fourth step, "Wipe hands on pants," is generally not printed, although countless freelance editors and proofreaders have handwritten this most accurate instruction through the help of Sharpie markers and a comic sensibility.

This particular dryer had printed on it, "High speed energy efficient hand dryers are now being used instead of paper towels." Yes, it was punctuated (or not punctuated) in exactly that way, and yes, it is a general statement that could be more effective had it said, "This high-speed, energy-efficient dryer replaces paper towels." That notwithstanding, the message continues by introducing metrics: "One ton of paper consumes 17 trees, three cubic yards of landfill space and pollutes 20,000 gallons of water."

One ton is 2,000 pounds. A paper towel is approximately 0.10 ounce, which means there are 160 paper towels in a pound, so it would take 320,000 to reach one ton. The problem is there is nothing to connect the metric

to the average user. Some who quickly do the math may be thinking they'll never use 320,000 paper towels in a lifetime, let alone a year.

Then there's the issue of 17 trees. Really? How many trees are cut down every year by Christmas tree farmers? I guarantee I've driven past Christmas tree lots with more than 100 trees cut and ready for sale. Maybe these trees are being recycled into paper towels. We have no way of knowing, but certainly 17 trees does not make a very good case.

Three cubic yards also does not sound very substantive, particularly when one considers that the U.S. football field (which to some has more religious significance than a Christmas tree) is 100 yards long by about 53.33 yards wide. Three cubic yards sounds about the size of two Gatorade coolers. (When those coolers are dumped on the winning coaches' heads, I can assure you they will use towels and not hand dryers to dry off.)

The key metric, polluting 20,000 gallons of water, is very serious and compelling, but it's so far down in the mix that the reader's mind has already strayed. The biggest problem is there is nothing to connect these metrics to the user. Even if the sign said, "The average individual uses two tons of paper in a lifetime," it would have some relevance. Then there are completely no specs about the dryer itself. They call it "high speed and energy efficient," but how so? Might the heating elements be exacerbating global warming, adding undesired particles to the atmosphere, or damaging an already addled ozone layer?

The whole scenario is of dubious value anyway, because there were two paper towel holders on either side of the dryer. In one of the two non-gym establishments I frequent, the dryer was removed outright and three more paper towel holders were added, then about eight paper towel stations throughout the exercise areas. This definitely makes one wonder if "judgment free" pertains to their business model.

Closing Thought

No matter how you choose to present numbers, do so in a way that makes sense. If an article is laden with typographical errors, the reader can lose focus. If you use numbers in a way that the reader or listener starts veering from the content, it can be a major distraction from the message (unless that's your goal, such as in a political campaign, in which case, have at it).

BRIAN LINDGREN, PMP, *is an STC Fellow and Chair of the Associate Fellows Nominating Committee. He is currently a program manager at Engility Corp. in Charleston, SC.*

"I WAS ABLE TO SMOOTHLY TRANSITION BETWEEN CAREERS, THANKS TO STC"
"My STC student membership was extremely valuable. After going back to school, I took two of STC's online courses, and the knowledge I gained continues to prove useful on the job. I look forward to further professional development as a New TC Professional member. Meeting other people in the field and taking on leadership roles in my chapter has not only contributed to my success, but it has also allowed me to stay on the cutting edge. I think that both students and new professionals can benefit tremendously from the people and resources of STC."
Rachel Mahan
MY NAME IS RACHEL MAHAN AND
I'M AN STC MEMBER
STC.org/renew

As a **member**, you get the **tools you need** to be **successful**.

- Education and Training
- Job Bank
- Award-Winning Publications
- Affinity Program
- Networking
- Chapters and Special Interest Groups
- Annual Conference
- Body of Knowledge
- Discounts and Special Offers

STC Society for Technical Communication

www.stc.org

Go for the Gold in 2017!

BY ERIN GALLALEE | *Member Services Manager*

THE 2017 MEMBERSHIP season is now open, and we invite you to become a Gold Value Package member! Year after year, the Gold Value Package membership category has an extremely high join and renewal rate. STC members feel it provides great value for its cost. Join or renew your STC membership today and enjoy benefits that build your professional career and help you stay ahead of your peers in the industry.

Now is a great time to join STC as a new member because you'll get the remaining months of 2016 for free! This will give you more time to take advantage of your Gold Value exclusive benefits, including:

- Five live webinars
- Free chapter membership, plus free SIG memberships
- An additional 20% off all online courses
- Early Bird registration pricing for STC's annual conference in Washington, DC, at the Gaylord National Resort, 7-10 May, any time during the registration season
- Ten free print issues of *Intercom* magazine

All of our membership categories also receive Classic benefits, such as a $245 discount on certification; online subscriptions to the award-winning *Intercom* magazine and *Technical Communication* journal; a personalized Education Report Card; access to STC's annual Salary Database; our library of over 150 free, on-demand Web seminars; discounts from Liberty Mutual, MadCap, Office Max, Lenovo, UPS, and others with our Affinity Program; member-only discounts on STC webinars, online courses, recorded sessions, and the annual Summit; access to the new Career Center, where you can post your résumé and view job postings; and networking opportunities with other TC professionals from around the globe.

Also, the Certified Professional Technical Communicator (CPTC) program is now open! This program offers a three-tiered professional certification: Foundation, Practitioner, and Expert. STC members save $245 when registering for the CPTC

shutterstock.com/ YOSHI.T

Foundation exam. The Gold Value Package will be even more valuable for those members collecting CEU credits for their CPTC certification. Employers are contacting us seeking CPTC professionals for opportunities, so get certified and be at the top of your field.

Renew your STC membership or join today and be a part of your Society. Visit *www.stc.org/membership/* for more information or email *membership@stc.org* with any questions. We look forward to welcoming you as a Gold Value Package member in 2017!

From the Journal Editor

BY SAM DRAGGA | Technical Communication *Editor*

I HAVE SEVERAL NEWS ITEMS to share about STC's quarterly research journal:

Changes to Cover Competition: Two Annual Deadlines

The competition to create the illustration for the journal's cover is getting simpler with only two deadlines a year and two topics for covers announced at the same time. This change will give potential contributors a choice of projects during each competition period and allow more time to create the illustrations.

Following are the calls for covers for the February and May 2017 issues. For this initial pairing of issue covers, the call allows only a three-month window for creation of the illustrations. The deadline for submission is December 1.

Thereafter, the calls for covers will be issued

- December 1 for the August and November issues, with a June 1 deadline
- June 1 for the February and May issues, with a December 1 deadline

Cover Competition: February 2017 and May 2017 issues

The February 2017 issue of *Technical Communication* is a special issue on the subject of "Globalizing User Experience: Strategies, Practices, and Techniques for Culturally Sensitive Design."

We are inviting illustrations that reinforce the subject of this special issue of the journal to be guest edited by Guiseppe Getto and Huatong Sun.

In creating your illustration for the February issue, you might consider

- UX in cross-cultural and international product deployment
- culturally sensitive design and UX research methods
- the impact of UX on the digital divide
- UX practices that cultivate diversity in organizations and societies
- UX and globally distributed teams
- influences on the design of information products for local cultures
- cultural differences regarding intellectual property and their impact on technical communication practices

The May 2017 issue of *Technical Communication* is a regular issue with articles on multiple topics. For this regular issue we are inviting cover illustrations on the subject of minimalist writing techniques.

In creating your illustration for the May issue, you might consider

- minimalist writing and the self-directed/self-correcting user
- the contribution of minimalist writing to user fulfillment
- costs and benefits of minimalist writing
- right and wrong times for minimalist writing
- minimalist writing versus plain or simplified language
- the evolution of minimalist writing
- variations of minimalist writing

For either issue, please submit your illustration (approximately 20x20 cm or 8x8 inches) as a high-resolution (300 dpi) jpg file by 1 December 2016 to *tceditor@stc.org* with a brief explanation (100-200 words) of how your illustration addresses the designated cover subject. Submissions will be anonymously reviewed, and a jury of peers will select each issue's cover. Honorable mentions will be published inside the journal.

For examples of previous covers, please visit the journal's website at *http://www.stc.org/techcomm*.

Special Issue in November

The November 2016 issue of the journal will focus on the subject of "Communication of Research Between Academic and Practicing Professionals" and will be guest edited by Mike Albers of East Carolina University. This special issue will include five articles that are sure to generate lively conversation in the coming year.

"Toward Multidirectional Knowledge Flows: Lessons from Research and Publication Practices of Technical Communication Entrepreneurs, by Benjamin Lauren and Stacey Pigg, summarizes interviews with eight practitioners to examine the influence of networking activities on learning and practice. Be sure to read this article if you are looking for answers to the following questions: Which publications are practitioners reading? Is the academic-practitioner binary informative or inadequate? How might practitioners and academics more effectively exchange research information?

"Patterns of Dissemination: Examining and Documenting Practitioner Knowledge Sharing Practices on Blogs," by Mark Hannah and Chris Lam, offers a statistical analysis of blogs written by practitioners. Questions answered in this article are several: Which topics occur with the highest frequency in the blog postings: technology, professionalization, or communication strategies? How frequent or infrequent are postings about research studies? How might academics cooperate or collaborate with practitioners on research issues?

"Academics Are from Mars, Practitioners Are from Venus: Analyzing Content Alignment within Technical Communication Forums," by Ryan Boettger and Erin Friess, analyzes published articles across a 20-year period according to topic and audience. Issues addressed include

the following: How have publications changed in this period of time? Are academics and practitioners reading the same articles? How cohesive or divided is attention of the discipline?

"Reflections on Research: Examining Practitioner Perspectives on the State of Research in Technical Communication," by Kirk St.Amant and Lisa Meloncon, reports on thirty interviews with practitioners to answer vital questions about the field: Which topics of research do practitioners consider especially important? Are practitioners willing to participate in collaborative projects with academics? How might practitioners and academics cultivate shared perspectives on research?

"Technical Communication, Academic Research, And Patient Education: A Multidisciplinary Collaboration" by Corinne Renguette, is a case study of practitioner-academic collaboration, specifically regarding the application of user-center design principles to the creation of a software application. Here you will find answers to key questions about the collaborative process: How was this collaboration initiated? How did it proceed? What was its level of success and how was this determined? Was the collaboration equally productive for the academic and practitioner sides?

The issue will also include 24 book reviews as well as summaries of 36 articles from related journals in the field—unique attributes that make *Technical Communication* a vital information resource for practitioners and academics in the field.

Comments and Questions

As always, if you have questions about the journal (or praise or criticism), I would appreciate getting your message at *tceditor@stc.org*.

FOUNDATION CERTIFICATION

STC's Certified Professional Technical Communicator (CPTC)

NOW OPEN

CERTIFIED PROFESSIONAL
Technical Communicator
CPTC™

For more information, visit www.stc.org/certification.

CERTIFIED PROFESSIONAL
Technical Communicator
CPTC™
FOUNDATION

CERTIFIED PROFESSIONAL
Technical Communicator
CPTC™
PRACTITIONER

CERTIFIED PROFESSIONAL
Technical Communicator
CPTC™
EXPERT

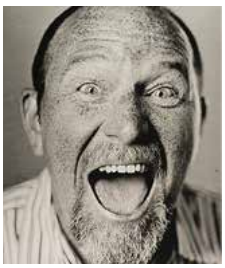
STC

An Interview with Dr. Carmen Simon

BY SCOTT ABEL | *STC Senior Member*

IN THIS ISSUE of *Meet the Change Agents*, Scott Abel, The Content Wrangler, interviews Carmen Simon, PhD, a cognitive scientist who is changing how the world communicates. Through her work with Rexi Media, a presentation design and training company she co-founded, Dr. Simon helps America's most visible brands craft memorable messages by focusing on how the brain works. She holds doctorates in both instructional technology and cognitive psychology and is a recognized expert in presentation design, delivery, and audience engagement. Her sought-after keynote speeches unveil science-based techniques for getting others to see your way, remember your way, and go your way.

Scott Abel: Dr. Simon, thanks for speaking with us today about the importance of neuroscience in professional communication. Before we dive deep into the world of brain science, tell our readers a little about who you are and what you do for a living.



In the digital age, change happens quickly. This column features interviews with the movers and shakers—the folks behind new ideas, standards, methods, products, and amazing technologies that are changing the way we live and interact in our modern world. Got questions, suggestions, or feedback? Email them to *scottabel@mac.com*.

Carmen Simon: I am a cognitive scientist, which means I research mental functions such as attention, memory, and decision-making. I convert the findings into practical guidelines we can all use to keep the world evolving. Mastering flight, creating electronic devices, and flying into space were decisions made possible by getting the attention of others and deciding to take action. Consider the bionic eye implant that allowed a blind man to see the outlines of his wife finally, and reach out to grab her hands, which he could see for the first time in a decade. To make this happen, many scientists had to get others' attention, create strong memories, and make it easy to decide to say yes to new procedures.

SA: What is neuroscience and what brought you to study it?

CS: Neuroscience is the field that studies the structure and function of the brain. In the past decade, a lot of progress has been made in decoding the brain. While we don't know the entire brain, using advanced brain imaging technologies, we now know a lot more than we've ever known. It's exciting to start applying some of these findings to the way we communicate. When we want to persuade others, we are mostly addressing a set of neurons. Understanding how those neurons form and retain connections and put the body in motion makes it more interesting to craft communication because you're using evidence, not opinions.

We have to be cautious though because people are now adding "neuro" to so many things that it's becoming tough to differentiate the field from pseudo-science. There is a lot of *neuro-nonsense* out there, popularized particularly by brain-imaging technologies. For example, just because a scan shows only a few highlighted areas in the brain, it does not mean that the other parts are not active (hence the "we only use 10% of our brain" myth). Try it for yourself. Next time you're in a group and want to leave a great impression, use the word *neuroplasticity* or talk about a study in which subjects were asked to look at [insert any object here] and "their insular cortex lit up." The insular cortex is a region of the brain that lights up in about a third of functional magnetic resonance imaging (fMRI) studies, so your accuracy will be pretty high. On the other hand, there are situations where we don't need neuroscience to form conclusions. I read about a functional MRI (fMRI) study on post-traumatic stress disorder (PTSD) in which the authors concluded, "PTSD is a brain disease and concrete proof of human suffering." I am sure we can observe human suffering without fMRI studies. Always look to combine neuroscience with cognitive and behavioral findings to form a well-rounded view of techniques we can use to improve communication.

Scott Abel: I love watching you give presentations. You are a fantastic presenter, and you practice what you preach. And, audiences respond. When I took your two-day workshop, I recall the most shocking thing I learned from the presentations was

that people forget up to 90% of what we present. Why is this? How does neuroscience help us know this is true?

CS: The percentage comes from a theory and formula in use for more than 100 years, called the *forgetting curve*. Whenever people come across information without the intent to remember it, they tend to forget most of it after a few days. This curve has an exponential shape, which means that we tend to forget quickly at first and slower later. In other words, if I attend a presentation and all I remember is that "last year, Americans forfeited 169 million days of vacation," this small tidbit will tend to stay with me long-term.

The advice I have for presenters is to figure out which "10%" they would like others to remember and use the rest of the 90% to bring the essential material into focus. Too often, presenters leave this process to chance. As a result, audience members are unable to recall a particular message. Instead, they form random memories, which have negative consequences in business. They lead to rambling and anemic content that creates unnecessary confusion, prompting those we hope to reach to ask additional follow-up questions. Random memories cause us to revise and re-create content to overcome the confusion.

SA: You talk a lot about the need to craft presentations and other communications that direct attention and guide behavior. What do you mean by this?

CS: Communicators aspire to create compelling, memorable content. But, no matter how good our communication skills may be, without understanding how the brain works, we're less likely to succeed.

Memory is about retention; about not forgetting. One of the reasons people forget is because they don't pay attention in the first place. Attention paves the way to memory.

Letting audiences direct attention on their own is risky. Most people won't make the effort to look where you think they should, or pay attention in ways you believe they might. That means that discovering and understanding your content depends on their willpower, which is in limited supply.

My advice is to guide people's attention instead of leaving it to their own devices. We can do this with words ("Look here") or provide physical stimulation that cannot be ignored, such as bright or large or colorful shapes in a space of neutral or small ones.

SA: What tactics can we use to ensure our content is as memorable as possible?

CS: I've identified 15 variables we can use to influence other people's memory. The most natural one is repetition. But even with repetition, we have to be careful not to cross the line into annoyance. For the brain to detect a pattern, we must repeat something at least three times. After that, consider combining a repetitive message with a reward that your audience's brains find satisfying.

For example, we may hear a message such as "Just Do It" many times, so Nike has to be creative and link it to rewards and update those rewards before the brain habituates. In Hong Kong, for example, they've integrated Nike products into experiences where participants complete missions such as running, playing football, walking a pet, or attending a dance class. Each of these activities earns them points they may exchange for accessories, clothing, or even tickets to sporting events. The lesson is to associate repetition with activities or ideas that deepen the connection with the products or content. Anyone can repeat a message and promise a prospect or customer an iPad for engaging with them, but that won't help you develop a closer relationship with them or make them feel like an insider.

SA: In your book, *"Impossible to Ignore: Creating Memorable Content to Influence Decisions"* you introduce a groundbreaking approach to creating memorable messages that are easy to process, hard to forget, and impossible to ignore. And, you do so with a simple three-step plan designed to help us craft compelling content. Can you talk a little about these three steps and what we're trying to accomplish during each?

CS: To answer this, we must look at memory from a different angle. Here is something to consider. What are the three most significant memory problems you experienced last week? A series of research studies have found that 60-80% of memory problems we have are related to forgetting to execute on a future intention. Yesterday, you may have intended to give someone a call, send a particular e-mail, or pick up your dry cleaning, and only remembered these today.

We have good intentions, but often forget to execute them. Even when we remember, if the reward is not compelling enough to get us to act, we don't. Our audiences are no different. They listen to us, and they may agree that what we say is helpful. But, even after they hear our message, even if they remember part of what we said, they might not do anything about it. We can address that by changing our approach to how we view memory.

Think of memory as a practical way of keeping track of the future, not the past. Imagine that we share content at Point A, and we hope people remember and act on it sometime in the future, at Point B. This "future" can be as close as two minutes, two days, or two weeks from now, or longer. It's sensible to ask, "What is happening in people's lives and what do they intend to do at Point B?" If we know this already at Point A, we can prepare at Point B to become part of people's memories and intentions when it counts.

A practical and profitable way to look at memory is from a prospective—not retrospective—angle. Prospective memory, which means acting on future intentions, is what keeps you in business (see Figure 1).

Research reveals that when people act on future intentions successfully, they complete these three steps, sometimes within fractions of seconds:

1. Notice cues linked to intentions;
2. Search their memory for something related to those cues and intentions, and if something is rewarding enough…
3. They execute (see Figure 2).

Figure 1. A model of prospective memory.

Figure 2. What happens when people act on future intentions.

Now consider your content. Imagine you must help your audiences go through the process described. Using the prospective memory model, at Point A, prime the audience with proper cues. Then, assist them to keep in long-term memory what is important. And finally, make it easier for them to execute on intentions at Point B. My book *"Impossible to Ignore"* provides practical guidelines designed to help you stay on people's minds long enough for them to act in your favor.

SA: Which is better for memory? Variety or sameness?

CS: We need both. To have memory, we have to have conscious attention. To sustain attention, we must have variety; otherwise, the brain habituates quickly when the stimulus does not change.

For example, a PowerPoint slide in a virtual presentation, which stays unchanged for minutes at a time, is an invitation to multitask. While variety is critical to sustaining attention, we need sameness for several reasons. First of all, the brain craves patterns. Sameness helps with that. When we form patterns, we save cognitive energy, and the brain looks at those messages favorably. Sameness also enables something to stand out, and therefore commands extra attention, which leads to the building of a memory trace.

You may remember a MasterCard commercial that listed a few items that would cost money and ended with something that didn't. For example, hot dogs, popcorn, sodas: $27, autographed baseball: $50, real conversation: priceless. By using this "template" in many subsequent commercials, the MasterCard message provides us with sameness and a familiar feeling, while the variety of the items keeps us rewarded and paying attention.

SA: Many technical communicators create modular components of content that we repurpose across multiple sets of information. In this case, modularity makes it possible for us to assemble chunks of content automatically into deliverables. The primary benefits to the organizations we work for are increased efficiency and decreased cost. Can chunking content provide additional benefits to those with whom we seek to communicate?

CS: Chunks are juicy to the brain. Because they typically come in small bites, our brain uses less energy to process them. However, it's important to make sure the audience's brain is provided with a bigger picture—context—to help them make sense of the small bites. This approach is necessary for two reasons: 1) A bigger picture adds context and meaning, which can form longer-lasting memories than brief exposure to small content chunks. And 2) Memory relies on associations. How modular components of content link together is as important as the design of the pieces themselves.

SA: Visuals are important in many types of communication. What advice can you provide to help us avoid one of our biggest challenges: Overcrowding the screen with far too much information?

CS: Overcrowding can be an issue. But, even screens full of content can contribute to forming memories. Imagine a complex diagram, let's say something depicting the architecture of a software application. When we expose our audience's brains to something like this, they have the opportunity to form two types of memory traces: *verbatim memory* and *gist memory*.

Verbatim means remembering something word-for-word, such as labels included in the chart. Gist means retaining the general meaning of what happened. So the question to ask when including a lot of materials on a screen is: what do I want viewers to remember? Is it critical that they retain some things verbatim or is it enough just for people to get the gist? If verbatim is important, then graying most of the chart out and

highlighting only some areas can help. If the gist is important—let's say it's critical for people to realize that something is complex—then the advice is to associate it with a strong meaning and move on to the next idea quickly. Ironically, complexity will sustain attention better than simplicity because it tends to be more interesting. Simplicity can be very boring after a while. Just make sure not to abuse complex content.

SA: There are a variety of factors that impact attention. What does neuroscience teach us about how colors influence what we notice?

CS: To answer this question, we can look at research findings that help us understand how humans see. The retina converts light into an electrical signal, which the optic nerve delivers to the brain. On their journey to the brain, images are separated into various pathways based on motion, depth, colors and forms, and then reassembled in the brain.

Contrast is a good technique when using colors because they allow your viewers to perceive shapes. Let's imagine for a moment *"The Two Sisters,"* by Renoir, a painting depicting two girls on the terrace of a French restaurant. One girl is wearing a bright red hat, the other a blue one, and they are both sitting in front of green plants and by a basket of colorful wool yarn. True to impressionist style, we can see the visible brushstrokes, which means we can detect the contrast better between colors and the artist can portray reality in a more vivid way. Next time you look at a Web site or a television ad, notice how your attention and comprehension of what's going on depend on the use of color contrast.

It's not necessary to use a particular color over another, but rather to create enough contrast between colors, so specific elements of content have a chance to stand out. Red, for example, is a bold color that has power. It has guts. But its strength depends on what's around it.

We can attract attention with physical properties, such as colors, but this technique doesn't build memories. To place something more durable in people's minds, we need to attach meaning.

For example, you may forget the yarn in Renoir's painting, but not if it's linked to meaning. One could wonder: Why do we see a basket of wool balls, typically meant for an indoor scene, outside, on a restaurant terrace? Some suggest that Renoir may have responded to a critic who described his paintings as "a weak sketch seemingly executed in wool of different colors." He decided to answer that critic and not make it so subtle because the wool basket completes a perfect triangle with the girls' hats. For your next communication artifact, ask this question: Am I tying psychical properties such as color with meaning to create stronger recall?

SA: I'm afraid our time is up. I'd like to thank you for making time to talk to me today. Are there any resources you can recommend to readers who would like to learn more about neuroscience and communication?

CS: Most resources we choose to give our attention have a motivational driver behind them. My dad recently passed away, and before he died, he was in a coma—the "vegetative state" about which you may have heard. My motivation right now is to learn more about what happens in the brain during such state because the answers can give us insight into understanding the concept of self, consciousness, and perhaps what it means to be human. I'm reading a book called *"Neuro-Philosophy and the Healthy Mind"* by Georg Northoff. Advancements in neuroscience consistently teach us about the human condition, and this can have enormous implications for medicine, psychology, and our general well-being.

SA: Thanks, Dr. Simon. I appreciate your time and valuable contributions to the discipline of neuroscience and its application to professional communication.

CS: It's been a pleasure. It will be great to see the readers applying these insights and go beyond the typical *neuroplasticity* or *insular cortex* neuro-babble, using solid guidelines that can help us improve the way we communicate and impact how people remember what we say.

Mark Your Calendar

Organization Events Across the Globe

F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 2-5 Oct
The **IEEE Professional Communication Society** will hold its annual conference, ProComm 2016, 2-5 October at the University of Texas, Austin, TX.
IEEE Professional Communication Society
http://sites.ieee.org/pcs/future-locations/

2 5-8 Oct
The **American Medical Writers Association** (AMWA) will hold its annual Medical Writing & Communication Conference, 5-8 October at the Sheraton Denver Downtown Hotel, Denver, CO.
AMWA
www.amwa.org/content.asp?contentid=74
240-238-0940

3 6-8 Oct
The **Council for Programs in Technical and Scientific Communication** (CPTSC) will hold its Annual Meeting 6-8 October at the Georgia Conference Center, Savannah, GA. The conference theme is (Re) Considering Programs in Terms of Methods, Methodologies, and Practices.
CPTSC
http://writeprofessionally.org/cptsc2016/
meloncon@tek-ritr.com

4 14-18 Oct
The **Association for Information Science and Technology** will hold its annual meeting, 14-18 October in Copenhagen, Denmark.
ASIS&T
https://www.asist.org/events/annual-meeting/annual-meeting-2016/
301-495-0900

5 23-25 Oct
The **Public Relations Society of America** (PRSA) will hold its 2016 International Conference, 23-25 October at the JW Mariott in Indianapolis, IN.
PRSA
https://www.prsa.org/Conferences/International-Conference/index.html

6 2-5 Nov
The **American Translators Association** (ATA) will hold its 57th Annual Conference, 2-5 November, at the Hyatt Regency in San Francisco, CA.
ATA
www.atanet.org/conf/2016/
+1-703-683-6100
ata@atanet.org

7 23-26 Jan 2017
The Annual **Reliability and Maintainability Symposium** will be held 23-26 January 2017 at the Rosen Plaza Hotel in Orlando, FL.
RAMS
www.rams.org/
RAMS2017@rams.org

8 26-28 Mar 2017
The Annual **Spectrum STC Rochester Conference** will be held 26-28 March, 2017.
Spectrum
http://stc-rochester.org/spectrum/

* STC-related event

In Support of a User's Manual: Taken a Bit Too Far?

BY TAMMY VAN BOENING | *STC Senior Member*

WHEN MY HUSBAND and I sold our previous home and purchased our current one, we decided to include our old washer/dryer set as part of the sale and to upgrade to much better appliances. After extensive research, we purchased an LG Front Loading washer/dryer set that had advanced technology: no belts, all electronic controls, and so on. Basically, the set was a computer on wheels that did everything but put the clothes in the wash for you. We also wisely decided to invest in a Service Protection Plan. We confirmed that the plan covered all things functional—including electrical and mechanical—for the machine before purchasing the plan. After only three years of owning this washer/dryer set, we have already had four service calls, and not for trivial stuff either. Let's just say that we have not been happy with it at all.

Well, yet another problem is starting, this time with the washing machine. All the text on the front panel that shows you the cycles that you can choose from (i.e., Permanent Press, Cotton, Delicates, and so on) is slowly "melting" away for no apparent reason. The whole panel is starting to look like one of those heat-transferred t-shirts with the graphics peeling off. This is definitely not good. I need to be able to turn the washing machine to the correct cycle, right?

I called the Customer Service line for the Service Protection Plan that we had purchased, described the problem to the Customer Service representative in detail, and explained that I would like the front panel of the washing machine replaced. "No, absolutely not," replied the representative, "as this is a cosmetic issue and not functional in nature. The washing machine still works." I had no patience for these stalling tactics. I replied very firmly that it is definitely a functional issue as I can't use my washing machine if I have no idea what cycle I am selecting for my clothes. I really don't want to wash my delicates on the Ultra White/Hot cycle, for example, right? The representative sighed heavily as I was obviously bothering him and not comprehending what he was trying to tell me. He blithely replied, "Go get the User's Manual and align the diagram of the panel in the manual to the panel on your machine so that you can select the correct cycle."

To say that I was flabbergasted by his dismissive reply is an understatement. I can't repeat what I exploded with, but you can just use your imagination and fill in the vitriolic nature of my reply. Suffice it to say that his manager's manager's manager understood my complete disbelief at his response and she personally placed the order with the directive to replace the panel, no questions asked.

As a technical communicator, I am the biggest proponent of a user's manual as anyone, but really? Even this was more than a bit too far for me.

shutterstock.com/ Evgeny Atamanenko

STC SUMMIT 2017
REGISTER
NOW &
SAVE
WASHINGTON, DC IN GAYLORD NATIONAL RESORT
7-10 MAY
THE EARLY BIRD RATE IS ONLY $895
TECHNICAL COMMUNICATION
SUMMIT '17
STC's 64th Annual Conference
summit.stc.org